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SIXTH ANNUAL REPORT

UNIVERSITY OF MARYLAND

EXTENSION SERVICE

FOR THE

YEAR ENDING JUNE 30, 1920

Cooperative Extension Work in Agriculture and Home Economics, Extension Service, University of Maryland and United States Department of Agriculture Cooperating.

T. B. SYMONS, Director

Distributed in furtherance of Acts of Congress of May 8 and June 30, 1914

UNIVERSITY OF MARYLAND—EXTENSION SERVICE

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†C. E. TEMPLE	Specialist in Pathology.
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*R. F. McHenry	Allegany	Cumberland
*G. W. Norris	Anne Arundel	Annapolis
*Edward E. McLean	Baltimore	Towson
*J. H. Drury	Calvert	Chaney
*W. C. Thomas	Caroline	Denton
*F. W. Fuller	Carroll	Westminster
*J. H. Knode	Cecil	Elkton
*J. P. Burdette	Charles	La Plata
*P. W. Moore	Dorchester	Cambridge
*P. A. Hauver	Frederick	Frederick
*J. A. Towler	Garrett	Oakland
*B. B. Derrick	Harford	Bel Air
*R. L. Post	Howard	Ellicott City
*H. B. Derrick	Kent	Chestertown
*F. J. Van Hoesen	Montgomery	Rockville
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*O. C. Jones	Queen Anne's	Centreville
*G. F. Wathen	St. Mary's	Loveville
*C. Z. Keller	Somerset	Princess Anne
*E. P. Walls	Talbot	Easton
*G. R. Cobb	Wicomico	Salisbury
*E. I. Oswald	Worcester	Snow Hill

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T. B. SYMONS, Director

Distributed in furtherance of Acts of Congress of May 8 and June 30, 1914

LETTERS OF TRANSMITTAL

DR. A. F. WOODS,
President:

I have the honor to submit herewith the Sixth Annual Report on the work of the Extension Service of the University of Maryland, in co-operation with the U. S. Department of Agriculture, for the fiscal year ending June 30, 1920.

Respectfully submitted,

THOMAS B. SYMONS,
Director, Extension Service.

College Park, Md.,
January 1, 1921.

HON. S. M. SHOEMAKER,
Chairman, State Board of Agriculture:

In accordance with the requirements of the Act of Congress, approved May 8, 1914, and known as the Smith-Lever Act, I have the honor to transmit herewith, for submission to the Governor of the State, the Sixth Annual Report of the Extension Service of the University of Maryland, in co-operation with the U. S. Department of Agriculture, for the fiscal year ending June 30, 1920.

Respectfully submitted,

A. F. WOODS,
President.

College Park, Md.,
January 1, 1921.

TO HIS EXCELLENCY ALBERT C. RITCHIE,
Governor of Maryland:

I have the honor to transmit herewith the Sixth Annual Report of the Extension Service of the University of Maryland, in co-operation with the U. S. Department of Agriculture, submitted to me through the President of the University.

Respectfully submitted,

S. M. SHOEMAKER,
Chairman, State Board of Agriculture.

Baltimore, Md.
January 1, 1921.

SIXTH ANNUAL REPORT
OF THE
...University of Maryland...
EXTENSION SERVICE
FOR THE YEAR ENDING JUNE 30, 1920

By THOMAS B. SYMONS, *Director.*

INTRODUCTION.

The agricultural industry in Maryland, as in other States, has passed through a critical period during 1920. Critical in the sense that the economic pendulum has required the farmer to plant under high costs and to reap in the face of falling markets. The economic conditions of the country and of the world following the war, at the beginning of the 1920 season, were such as to justify the expectation that prices of farm products would be the last to drop in the deflation period or approach of the normal period which was naturally expected sooner or later following the war. The world shortage of food in 1920 justified the farmer's incurring high costs fo. the production of food. With the gradual shrinkage of foreign exchange values, the restriction of our credits and the consequent reduction of industry during the summer, the demand for everything, including food products, has been greatly lessened, until now it is forecast generally that we shall experience a period of depression in all industry that will cause much anxiety and probably many failures in business.

It was natural to assume that war prices would gradually be reduced, but it was unnatural to expect that in the face of a world shortage of food products, with people starving in many sections of the world, that prices of farm products in the United States would fall so rapidly and thereby cause severe losses to our farmers. Upon the basis of 1920 yields of cereals in Maryland, the farmers of the State stand to take a loss of approximately $18,770,229 between the time of seeding, or even the middle of the season, July, 1920, and December, 1920. The loss in live stock values is also of considerable moment, although the break in live-stock prices was evident early last spring. The shrinkage in the value of our wool clip is just another illustration of the predicament in which the farmers have been placed. Wool has sold for the past three years from 60 to 75 cents per pound. Our clip amounts to approximately 500,000 pounds. The past spring our sheep growers could not sell their wool in many instances at any price. There has been no market for wool during the whole season

and now the price is only about 20 cents per pound. This one item indicates a net loss to the sheep growers of $250,000. It is conservative to say that the reduction in farm product values during the past year would approximate $50,000,000 for the State of Maryland, or an equivalent of the total value of all crops in 1909. It is unnecessary to point out what such a loss means, not only to the farmers themselves, but to all other forms of business which are dependent upon the prosperity of agriculture.

Crop Yields for 1920.

In the face of this situation it is interesting to observe the splendid crop yields that the farmers of the State have produced during the past season. These figures are given by the Bureau of Crop Estimates, U. S. Department of Agriculture.

Crop		1909	1918	1919	1920
Corn	Acreage	647,000	686,000	680,000	670,000
	Bushels	17,911,000	24,010,000	27,880,000	25,795,000
	Value	$11,015,000	$32,414,000	$39,037,000	$20,893,000
Wheat	Acreage	589,000	732,000	785,000	670,000
	Bushels	9,463,000	11,346,000	10,598,000	11,390,000
	Value	$9,876,000	$24,848,000	$22,786,000	$18,794,000
Oats	Acreage	49,000	60,000	65,000	65,000
	Bushels	1,160,000	1,980,000	1,829,000	2,112,000
	Value	$584,000	$1,703,000	$1,492,000	$1,478,000
Rye	Acreage	28,000	35,000	30,000	30,000
	Bushels	357,000	525,000	420,000	462,000
	Value	$252,000	$892,000	$685,000	$721,000
Buck-wheat	Acreage	10,398	12,000	13,000	15,000
	Bushels	152,000	240,000	299,000	300,000
	Value	$99,216	$396,000	$463,000	$399,000
Barley	Acreage	4,494	6,000	6,000	6,000
	Bushels	135,000	186,000	198,000	165,000
	Value	$79,000	$223,000	$244,000	$182,000
Irish Potatoes	Acreage	39,299	43,000	55,000	60,000
	Bushels	3,444,000	4,240,000	5,170,000	6,120,000
	Value	$1,782,000	$5,088,000	$6,721,000	$5,814,000
Sweet Potatoes	Acreage	7,956	11,000	12,000	11,000
	Bushels	1,065,000	1,430,000	1,680,000	1,386,000
	Value	$483,000	$2,145,000	$2,234,000	$1,594,000

HAY	Acreage ...	398,000	455,000	450,000	472,000
	Tons.....	477,000	614,000	630,000	732,000
	Value	$6,011,000	$16,455,000	$15,120,000	$18,000,000
TOBACCO ..	Acreage ...	26,072	32,000	29,000	35,000
	Pounds.....	17,845,000	26,560,000	19,575,000	30,625,000
	Value	$1,457,000	$7,968,000	$5,872,000	$8,881,000
APPLES	Bushels ...	.....	2,365,000	1,944,000	3,330,000
	Value	.....	$2,128,500	$3,553,600	$2,597,000
PEACHES ..	Bushels ...	.....	600,000	731,000	897,000
	Value	.....	$1,200,000	$1,242,000	$2,377,000
PEARS	Bushels ...	.....	455,000	420,000	616 000
	Value	.....	$455,000	$546,000	$396,000
		Summary			
ALL CROPS...	Acreage ...	1,934,954	2,254,000	2,312,000	.....
	Value	$43,920,000	$127,961,000	$133,726,000	$107,847,000

It is seen that in practically every staple crop an increased acreage and yield has been secured. This demonstrates the manner in which the farmers have done their part in maintaining production even under most difficult conditions.

The farm labor problem is still with us in a somewhat modified form. In the spring of 1920 there was indicated a greater shortage of farm labor than ever before, but with the approach of business depression this fall the labor situation is somewhat improved. Nevertheless, during the stress of the season farmers were compelled to exert themselves and combat as difficult a situation in the cultivation and harvesting of their crops as during the war period. In agriculture it has been a case of increased production with limited forces and longer hours of work, while in other industries the reverse has been the rule.

1920 CENSUS.

Inasmuch as the regular Census was taken during the past year the figures for agriculture, which are just issued, present some interesting comparisons.

Farms and Farm Acreage.

	1920	1910
Number of farms.....	47,908	48,923
Operated by: Owners.....	32,805	33,519
Free from mortgage.....	19,292	21,084
Mortgaged	11,339	12,127
No mortgage report.....	2,174	308
Tenants	13,841	14,416

Operated by:		
White farmers	41,699	42,551
Native	40,130	40,669
Foreign-born	1,569	1,882
Colored farmers	6,209	6,372
Land in farms:		
Total acres	4,757,999	5,057,140
Improved acres	3,136,728	3,354,767
Average acreage per farm:		
Total	99.3	103.4
Improved	65.5	68.6

Farm Values.

	1920	1910
All farm property	$463,638,120	$286.167,028
Land and buildings	386,596,850	241,737,123
Implements and machinery	28,970.020	11,859,771
Live stock	48,071,250	32,570,134
Average value per farm:		
All farm property	9,678	5,849
Land and buildings	8,070	4,941
Land alone	5,425	3,341
Average value per acre:		
Land and buildings	81.25	47.80
Land alone	54.62	32.32

Mortgage Debt.

	1920	1910
Farms reporting amount of debt:		
Number	10,407	10,754
Value	$75,082,413	$44,398,721
Amount of debt	27,481,197	15,673,773
Per cent. of value	36.6	35.3
Average rate of interest paid, per cent.	5.6	....
Average debt per farm	$2,641	$1,457

Live Stock.

	1920	1910
Horses	141,341	* 149,596
Mules	32,621	* 22,367
Cattle	283,377	* 248,687
Sheep	103,027	* 126,251
Chickens	3,436,376	2,650,650
Hives of bees	16,117	23,156

*Excluding spring colts, calves and lambs.

Live Stock Products.

	1919	1909
Milk—gallons	58,754,193	59,735,522
Wool—pounds	551,194	705,320
Eggs—dozen	15,085,691	15,533,732
Chickens raised	5,257,655	5,949,459

Value of Crops.

	1919	1909
All crops	$109,683,574	$40,330,688
Cereals	55,845,785	21,908,730
Other grains and seeds	467,902	96,104
Hay and forage	16,137,744	6,012,865
Vegetables	25,371,723	7,996,105
Fruits and nuts	6,022,369	2,805,526
Other crops	5,838,051	1,511,358

Acreage and Production of Principal Crops.

		1919	1909
CORN	Acres	619,265	647,012
	Bushels	21,083,076	17,911,436
OATS	Acres	48,891	49,210
	Bushels	1,082,994	1,160,663
WHEAT	Acres	664,295	589,893
	Bushels	9,620,526	9,463,457
RYE	Acres	21,196	28,093
	Bushels	230,596	357,562
HAY AND FORAGE	Acres	622,939	398,892
	Tons	806,910	477,711
HAY CROPS	Acres	385,200	387,507
	Tons	444,894	440,464
CORN CUT FOR FORAGE	Acres	219,684	(Not
	Tons	233,779	reported)
OTHER FORAGE CROPS, INCLUDING SILAGE	Acres	18,055	11 385
	Tons	128,237	37,247
POTATOES	Acres	46,837	39,299
	Bushels	4,918,766	3,444,311
SWEET POTATOES	Acres	10,185	7,956
	Bushels	1,453,880	1,0?5,956

Junior Short Course for Boys' and Girls' Clubs at the University.
—Photographed in Cooperation with States Relation Service.

TOBACCO	Acres	28,550	26,072
	Pounds	17,336,859	17,845,699
STRAWBERRIES	Acres	7,096	14,292
	Quarts	8,976,057	23,611,095
APPLES	Trees	1,651,936	1,288,482
	Bushels	1,517,834	1,822,824
PEACHES	Trees	997,086	1,497,724
	Bushels	564,111	324,609

As compared with 1910, the total value of crops shows an increase of 172 per cent.; cereals, 154.9 per cent.; potatoes, 438 per cent.; sweet potatoes, 471 per cent.; tobacco, 292.6 per cent.; fruits and nuts, 114.7 per cent.

Of greater significance are the figures for increased yields per acre. The average yield of corn per acre in 1919 was 34 bushels, while in 1909 the average was 27.7 bushels. There was a reduction in the average yield of wheat from 16 bushels to 14.5 bushels, but this was due to the unfavorable season for wheat in 1919. Large increases in potato yields are indicated.

The large increase in total value of all crops and farm property as well as live stock is due in part to war values. As previously pointed out, the values to-day would be naturally reduced.

Some Results of the Present Situation.

While the present outlook for the agricultural industry economically may be interpreted as rather gloomy, it has its bright side, and I believe that the new era in agriculture which we are approaching holds out tremendous possibilities for those who engage in the industry upon the proper basis and with the proper view-point.

I believe there has been greater progress in efficiency in the agricultural industry in Maryland during the past five years than in any other industry. A glance at the figures of production during the past three years will indicate that more and better farming has been conducted recently with considerably less labor than ever before. A greater amount of labor-saving machinery is being used with the effectiveness that is indicated in the results. It is true that due consideration must be given for the extra work that has been conducted by the farmers and their families during this stressing period.

The greatest result, however, that is evident upon all sides is the awakening among the farming population that justice in the sale of farm products and in their proper distribution must govern future operations if we can expect agriculture to go forward. The farmers are now determined that they will not continue to produce for less

than cost of production and that they will perfect machinery so that their products can be marketed in an orderly fashion as far as possible and that a reduction in the spread between the producer and consumer may be accomplished with benefit to both. This involves coöperative organization among farmers, proper basis of finance, better systems of grading and standardization of products, marketing, transportation and distribution. The farmers of Maryland are alive to present needs and much progress has been made during the past year in this direction.

The outlook for successful coöperative enterprises among farmers of the State was never so bright as today. Moreover, the demands of the time, viz: with prices for farm products below cost of production and prices for all farm supplies so high, has given an unsurpassed impetus to cooperative buying of farm supplies. As a result, much group purchasing of standard products will be made this coming year. Briefly, the policy of farmers' organizations will be to control their products as far as possible on their way to the consumers and to deal as directly as possible with manufacturers in the purchase of necessary supplies of all kinds. This policy has been forced upon the farming population on account of the inequities and inefficiency of the present system. This policy will not be carried forward as a revolution but developed as an evolution from present conditions.

The present losses in agriculture have quickened the onward march of coöperation among farmers, and that reason alone is sufficient to hold out a most encouraging future for the agricultural industry in this State, which is so favorably located to many of the great markets of the East. A fuller discussion of the progressive organization among farmers and coöperative marketing will be given under the project headings.

Administration

The administration of the Extension Service during the past year has been carried on as heretofore. No changes have been made in the officers except that of District Agent. A splendid spirit of coöperation animates every one and the relations of the service to other divisions of the Institution and State Department of Public Instruction are most agreeable from every standpoint. Owing to limited funds and the demands for increased salaries, it was necessary to delay the appointment of an assistant for supervisory work among the men agents. As a result, the work of the Director and Assistant Director has been more strenuous.

The office force is now organized upon a most efficient basis and the general work of the service is handled with dispatch. A total of 20,567 first-class letters have been mailed from headquarters during the year, while the total pieces of mail sent from the office has been about 62,094.

Relations With Agricultural Associations.

Close affiliation is maintained by the service with the farmers' organizations of the State. Various specialists serve as secretaries of the various agricultural associations.

The work of the State Agricultural Society and its constituent organizations, including the county federations of community organizations, is conducted in close association with all the forces of the service. As a result of this unity in aim and purpose, as well as in prosecution of work, there is no division in the agricultural ranks of the state.

Sources of Extension Revenue.

During the fiscal year ending June 30, 1920,there were available for Extension work the following funds: Federal Smith-Lever, $43,569.17; State Smith-Lever,$33,569.17; U. S. Department of Agriculture (regular), $18,700.00; Supplementary Extension (Federal), $19,366.83; County Demonstration Fund, $48,000; State Fund for General Extension, $5,060; State Horticultural Fund, about $4,000; about $15,000 was contributed by the various counties for miscellaneous expenses for the men and women; or a total of $187,265.17.

During the present fiscal year there is available $50,024.78 Federal Smith-Lever; $40,024.78 from State Smith-Lever; $15,000 from U. S. Department of Agriculture (regular); $19,366.83 from Supplementary Federal Extension; $48,000 from County Demonstration; $5,000 from General Extension; $4,000 from State Horticultural, and about $30,000 contributed by various counties, or a total of $211,416.39 devoted to extension activities.

A detailed statement of the expenditure of the funds available for the fiscal year ending June 30, 1920, will be appended to this report.

The growing appreciation of the County Agent work as reflected in the constantly increasing appropriations from the County Commissioners is very encouraging and indicates the stability of the work. The policy of having County Agent work supported from public funds only, including Federal, State and County, is wise and in the interest of public service. It is unnecessary to point out here that the service is tremendously handicapped at present to carry forward many lines of work that are demanded by the farmers and home makers and unable to properly support those now working with the service on account of limited finances.

Changes In Personnel.

The following changes in personnel have occurred during the past year: P. W. Moore was appointed agent for Allegany county, April 19th, to succeed Kenneth Cole, who resigned April 1st. August 6th

Mr. Moore was transferred to Dorchester county, to succeed J. F. Davis, who resigned August 1st, and R. F. McHenry succeeded Mr. Moore in Allegany county August 6th; Edw. E. McLean was appointed agent in Baltimore county November 1st, vice J. F.Hudson, resigned; W. C. Thomas was appointed agent in Caroline county January 1st, vice E. O. Anderson, resigned; R. L. Post was appointed agent in Howard county March 1st.vice J. L. Fidler, resigned; W. B. Posey was appointed agent in Prince George's county to succeed C. H. Taylor, resigned; Stanley E. Day resigned as Assistant Boys' Club Agent March 1st to succeed T. L. Smith as County Agent in Washington County; W. C. Snarr was appointed Assistant County Agent in Harford county July 1st; T. E. McLaughlin, District Agent, resigned July 1st; T. V. Downing, Assistant Boys' Club Leader, resigned August 31st; Dr. S. S. Buckley, Animal Husbandry Specialist, resigned April 16th and was succeeded by G. H. Bedell on October 1st; M. D. Bowers was appointed Publicity Specialist on May 1st.

Miss Celeste Crippen was appointed agent in Dorchester county July 1st, vice Miss Frances Stuart, resigned; Miss Imogene Gardiner was appointed agent in Charles county, vice Miss Julia Etchison resigned; Miss Frances Gerber was appointed agent in Frederick county July 1st vice Miss Ella Rhodes, resigned; Miss Ethel Joy was appointed agent in St. Mary's county July 1st vice Miss Katherine Murrin, resigned; Miss Rhea Morgan was appointed agent in Allegany county March 1st; Miss Dorothy Ross was appointed agent in Cecil county December 1st, vice Miss Esther Wotring, resigned; Miss Bertha Ide resigned her position as agent in Baltimore county June 25th; Mrs. Nell Lawson resigned her position as agent in Howard county March 13th; Miss Mabel Stephenson, District Agent, resigned her position September 30th.

The turn-over in the women's work is too high for satisfactory results. We should be able to pay higher salaries for trained women workers. The people are demanding men and women of unusual ability as specialists and agents. Increased traveling costs and living expenses have mainly contributed to changes in personnel.

Increasing Efficiency of Workers.

Monthly conferences of the specialists are held at headquarters and monthly group meetings of the agents are held in various sections of the State. At these conferences plans of work are discussed and methods for increasing efficiency and advancing the extension activities by all forces are perfected. Annual conferences of all agents are held once a year. Definite programs of work are agreed to by specialists and agents in consultation with local authorities and farmers' organizations. Each agent and specialist submit weekly and yearly reports. Maps accompany yearly reports visualizing the work in all sections of the State.

The administration of the service in coöperation with the States Relations Service of the U. S. Department of Agriculture during the past year has been most agreeable and satisfactory. We are especially indebted to Mr. J. A. Evans, Chief of the Extension Work, South, for his cordial assistance and helpful suggestions in directing the Extension Work in the State. The Assistant Director, Dr. Bomberger, and the Home Demonstration Agent, Miss Venia M. Kellar, have rendered able and unselfish support in the administration of the service. It has been a source of much regret that we could not give Dr. Bomberger more assistance in the various projects and the administrative work that he is carying on.

Publications.

On account of the necessity for curtailment of expenses, funds allotted to publications have been reduced. The State College Journal, which was changed to be designated as the Extension Service News July 1st, 1920, has been published monthly by the service. Timely articles relating to the work of specialists and agents are presented in brief but comprehensive style. A total of about 100,000 copies, with 400,000 pages, have been issued. The following bulletins have been published:

Bulletin No. 2 (revised), "The Relation of Lime to Agriculture," 3,000 copies; No. 12 (revised), "The Rural School Lunch," 3,000 copies; Fifth Annual Report, 3,000 copies; No. 21, "Sewing Bulletin," 3,000 copies; Educational Extension Bulletin, No. 20, 3,000 copies.

A large amount of circular matter has been distributed to the agents and farmers.

Mr. M. D. Bowers was employed May 1st as assistant in Agricultural Journalism. He has directed his efforts toward preparing press matter for the daily and weekly papers to stimulate the development of those phases of rural work with which the Extension Service is concerned and to emphasize the importance of the agricultural industry to the welfare of the State. Likewise the fact constantly has been kept in mind that closer coöperation between rural and urban classes is desired from the standpoint of mutual benefit and that numerous problems affecting the farmer are not only unknown to the general public, but at the present time are unfortunately subjects of such widespread misinformation as to prejudice public opinion in some degree against the farmer.

News Bulletins.

Eighty-three bulletins have been sent out to the press of the State; thirty-three were sent to both daily and weekly papers. Results as indicated from the two morning newspapers in Baltimore and from many weekly newspapers show that this material has been generally

A Demonstration in Growing Bearded Purple Straw Wheat in Allegany County. Average Yield on 27 Acres, 41.4 Bushels.

used. *The Maryland Farmer* has been generous in placing its space at the disposal of the Extension Service. Despite the fact that only a comparatively few papers are available as a check, clippings are now on file which show an aggregate reproduction of approximately 1309 column inches of printed matter, which is equivalent to 65 columns of printed matter.

In addition to the News Bulletins, twenty-five special articles have been prepared and sent to *The Maryland Farmer, The Baltimore American, The Daily* and *Sunday Sun* and other publications. Approximately 451 column inches, or more than 22 newspaper columns, of this matter have been printed. Every effort has been made to popularize the work of the service and associated divisions of the Institution in presenting the results of the work of all forces in popular readable style.

Projects.

The work of the service is conducted under regular projects by the respective leaders. All projects are planned in advance and approved by the States Relation Service of the U. S. Department of Agriculture

County Demonstration Work.

The county demonstration work has made excellent progress in the State during the past year. We have been able to maintain an agent in all the counties of the State. In the great majority of counties the county agent is recognized as an indispensable assistant to the farmers. We have been fortunate in maintaining an able force of agents who have worked most earnestly to improve the condition in their respective counties.

The outstanding feature of the year's work is the coöperation of the farmers' organizations in assisting the agents in carrying forward their programs of work. The perfecting of farmers' organizations and the development of coöperative spirit for better marketing practices, as well as coöperative purchase, will mark the year's activities.

All projects in agriculture are carried out through the county agents. The specialists coördinate their work with the agents by practical demonstrations in the field. The specialists serve to aid the agents in meetings and otherwise assist in improving the phases of the industry in which the farmers of any county are particularly interested.

The County Agent's position is the most difficult in the agricultural field to fill. It is also the most strenuous job when an agent endeavors to meet all the demands that are made upon him.

During the season of 1920 the County Agents made 18,337 visits to farmers; they had 27,999 visits or calls upon them for informa-

tion at their offices; they traveled 188,266 miles in the counties, and a total of 2,406 meetings were held, with an attendance of 185,199

I wish it were possible to discuss each agent's work by counties. Many of the agents' reports which have been submitted are models in their style and presentation and comprehensive in showing what is being accomplished in their respective counties. The summary of the work which follows gives only in a meagre degree any conception of the agents' activities.

The Assistant Director, Dr. Bomberger, has assisted in the supervision of the County Agent force. Mr. T. E. McLaughlin served as District Agent until July 1st, 1920, when he resigned to take up commercial work. Mr. McLaughlin rendered able service in the State, first as County Agent in Harford county and later as District Agent. All forces regretted to have Mr. McLaughlin leave the service.

The following County Agents are serving in their respective counties:

Name	*County*	*Headquarters*
R. F. McHenry	Allegany	Cumberland
G. W. Norris	Anne Arundel	Annapolis
E. E. McLean	Baltimore	Towson
J. H. Drury	Calvert	Chaney
W. C. Thomas	Caroline	Denton
F. W. Fuller	Carroll	Westminster
J. H. Knode	Cecil	Elkton
J. P. Burdette	Charles	La Plata
P. W. Moore	Dorchester	Cambridge
P. A. Hauver	Frederick	Frederick
J. A. Towler	Garrett	Oakland
B. B. Derrick	Harford	Bel Air
R. L. Post	Howard	Ellicott City
H. B. Derrick	Kent	Chestertown
F. J. Van Hoesen	Montgomery	Rockville
W. B. Posey	Prince George's	Upper Marlboro
O. C. Jones	Queen Anne's	Centreville
G. F. Wathen	St. Mary's	Loveville
C. Z. Keller	Somerset	Princess Anne
E. P. Walls	Talbot	Easton
G. R. Cobb	Wicomico	Salisbury
E. I. Oswald	Worcester	Snow Hill
S. E. Day	Washington	Hagerstown

Local Agents

J. F. Armstrong (colored)	Southern Maryland	Seat Pleasant, Md.
L. H. Martin (colored)	Eastern Shore	Princess Anne

SUMMARY OF MEN'S WORK.

The following Summary of work conducted is taken from the agents' reports:

Crop	*No. Demonstrations*	*Average Yield Per Acre*
Corn	320	67.73 bushels
Wheat	160	19.5 bushels
Oats	18	51.2 bushels

Rye	71		20	bushels
Buckwheat	10		30	bushels
Barley	31		36	bushels
Tomatoes	200		190	bushels
Tobacco	49		805	pounds
Alfalfa	253		4	tons
Red Clover	67		2.4	tons
Crimson Clover	173			
Sweet Clover	23		3.2	tons
Japan Clover	6		2	tons
Soy Beans	249	grain	16.4	bushels
		hay	2.5	tons
Vetch	26		3.5	tons
Mixed Grasses	7		2.6	tons
Sudan Grass	7		3.5	tons
Cow Peas	101	seed	12	bushels
		hay	2.5	tons
Canning Peas	17		847	pounds
Irish Potatoes	230		231	bushels
Sweet Potatoes	30		266	bushels

ORCHARDS ..... 1,163 Instructed in the culture of 341,680 trees.

DAIRY CATTLE..... 70 Pure bred bulls and 638 registered heifers were brought into the State as a result of the activities of the agents.

BEEF CATTLE..... 7 Pure bred bulls and 13 pure bred heifers have been brought into the State through the agents' influence.

HOGS ..... 90 Pure bred boars and 479 pure bred gilts have been purchased by demonstrators.

SHEEP ..... 9 Pure bred rams and 23 pure bred ewes have been purchased as the result of the agents' influence.

POULTRY ..... 103 Demonstrations involving

19,463 chickens,
427 ducks,
100 guineas,
1,180 turkeys,
400 geese,

21,570

have been carried on under methods advocated by the county agents.

Girls' Club Members in the "Use More Milk Campaign."

LIVE STOCK DISEASES AND PESTS	29,841	Head of live stock have been treated for diseases at the suggestion of county agents and specialists.
FERTILIZER	7,222	Farmers followed suggestions of the county agents relating to better care and handling of fertilizers. 2,711 tons of fertilizer were purchased at the agents' suggestion at a saving of $22,972.
MANURE	1,437	Farmers followed suggestions of the agents relating to the better care and handling of manure. The agents placed 127 manure spreaders on demonstration farms.
SILOS	303	Silos were built under the direction of the county agents.
LIME	1,551	Farmers used lime under the direction of the county agents.
ORGANIZATION	67	Farmers' organizations, membership 4,286, formed during the year.
		Total in State at present time—405 farmers' organizations with a membership of 18,781.

A conservative estimate of the increase in dollars and cents resulting from farm crops grown as demonstrations under the agents and specialists amounts to $650,000.

Negro Work.

Although restricted in funds we have continued the negro work in the State. Two negro agents have devoted full time to demonstration work—one on the Eastern Shore and the other in Southern Maryland. In addition, the County Agents in all counties have aided colored farmers where possible. The colored agents report having conducted 329 demonstrations in farm crops and live stock. They have made 648 visits to colored farmers and traveled 8,973 miles. Several community exhibits have been held and many institutes and field meetings conducted. We find a generous response among the colored farmers for improving their methods of farming and standards of living.

Girls' Club Members in the "Use More Milk Campaign."

Home Demonstration and Girls' Club Work.

Substantial progress has marked the work of the Home Demonstration specialists and agents in the State during the past year. The farm women are beginning to appreciate more fully the possibilities of this work to aid them in their manifold activities on the farm and in the home.

Miss Venia Kellar, who is in charge of this work, reports great difficulty in securing trained agents and retaining them upon the present basis of salaries and travel allowances. Notwithstanding the many changes in the agents for the counties, splendid results are being secured. The work has been more definitely systematized during the past year and a great deal of organization work has been accomplished.

To give a rather comprehensive idea of the scope of the home demonstration work, I cite in full the reports of the District Agents which Miss Kellar submits, giving the projects and their discussion in progress in the western and southern sections of Maryland. Similar work is carried on in the Eastern Shore counties.

From the Report of Ola Day, District Agent, Western Maryland.

Problems in Home Demonstration Work being attacked this year in Western Maryland counties:

1. The Clothing Problem.
   (A) Home Dressmaking.
   1. Selection and testing of materials.
   2. Utilizing of materials on hand.
   3. Adaptation of patterns.
   4. Necessary equipment for home dressmaker.
   5. Home-made Dress Form.
   6. Simple Finishings and Trimmings.
   7. Short Cuts in Sewing.
   8. Methods of cleaning and renovation.
   9. Special Clothing Features.
      (a) Fashion Shows.
      (b) Clothes Clinics.
      (c) Clothing Exhibits.

   (B) Home Millinery.
   1. Making and covering of frames,
   2. Renovation of hats.
   3. Home-made trimmings.
   4. Hats for children.

2. Conservation of Woman Power.
   1. Power Machinery—

METHODS OF PROCEDURE.

1. *The Clothing Problem.*

(A) Home Dressmaking.

1. Selections and testing textiles. The need for home dressmaking has been pressing for many reasons; first, the exorbitant price of the ready-made garment; secondly, the poor materials available due to use of shoddy and adulterations. To aid the inexperienced buyer talks and demonstrations have been given to show how woolens may be tested for percentage of wool, the relative wearing qualities of different weaves. How to detect artificial and weighted silk. Points to consider in buying cotton goods.

2. *Utilizing of Materials on Hand.*

An exhibit was arranged and taken to all counties to show simple dresses that could be made

(Water)
(Gasoline Engines)
(Electricity)

2. Labor-saving devices.
3. Proper laundry equipment.
4. Rearrangement of equipment to lessen kitchen mileage.
5. Proper working levels.
6. Electricity as a servant.
7. Running water in the kitchen a necessity.

3. Budgets.
4. Practical Dietetics.
5. Health and Sanitation.
6. Beautifying Farm Home and Interior Decoration.
7. Recreation.
8. Marketing—Exchange at Fairs.
9. Community Organization.
10. Stimulating Interest in Agricultural Exhibits and Fairs.
11. Farmers' Institutes and Short Courses.
12. Americanizing Foreign Element.
13. Co-operation with various organizations to promote Health and Social Welfare.

from cast-off coat suits, children's clothes from men's trousers and suits, flour sacks, men's shirts, combination of remnants.

3. *Adaptation of Patterns.*

An exhibit was arranged showing how a plain kimona sleeve pattern could be used for night-gown, apron, house dress, street dress. Demonstration given to show how shirt-waist pattern can be used for one-piece dresses. The one pattern that really fits is recommended in preference to the new commercial pattern for each gown. The same ideas were worked out in children's dresses showing the many variations possible from one pattern.

4. *Necessary Equipment.*

Sewing machine.
Dress form.
Skirt marker.
Good needles and shears.
Braids, bindings, etc.

5. *Home-made Dress Form.*

Demonstrations were given showing how gummed Kraft paper can be made into dress-form duplicating the figure exactly at a cost less than one dollar. These forms can be mounted so as to be used for skirts and one-piece dresses also.

6. *Simple Finishing and Trimmings.*

By demonstration and exhibit it was shown how yarn, floss, contrasting materials, braids, etc., can be applied so as to give an artistic finish to the garments. Also bound buttonholes, tailored pockets and other tailored finishings.

7. *Short Cuts in Sewing.*

Demonstrations and exhibits showing how a one-piece street dress can be made in three hours and thirty minutes—a kitchen apron in 16 minutes—a child's rompers made entirely by machine in two hours. Use of machine attachments.

8. *Methods of Cleaning and Renovations.*

Demonstrations showing uses of carbons, carbon tetricloride, ammonia, lux, also removal of stains, dyeing, how to sponge and press woolens, how to launder silks and georgettes. How to launder woolens.

9. *Special Clothing Features.*
(a) Fashion Shows.

Three fashion shows have been held in Western Maryland. Each one staged in co-operation with local women, every age from the infant to the mature woman was represented, each dressed to illustrate some particular point in suitability, color, line, economy, renovation.

(b) Clothes clinics were conducted at the State Fair at Timonium, and county fairs at Oakland, Frederick and Hagerstown. A home-made ironing board and cabinet with full equipment for stain removal and renovation of materials was shown. Power sewing machine. Home-made dress form. Home-made sewing screen. Properly equipped sewing table. Exhibit of home-made finishings and trimmings for dresses and hats. Simple dress for every occasion. Practical under garments. Exhibit of renovated clothing. Exhibit of hats for all ages and occasions. Everything home-made.

(c) Clothing Exhibits.

At each important gathering of country people, an exhibit of some kind has been arranged. The clothing exhibit being the most popular consisted of the garments referred to elsewhere.

(B) *Home Millinery.*

Millinery demonstrations have been given throughout Western Maryland helping housewives to renovate old hats, make new ones and to wear hats that are more becoming and suited to the individual.

2. *Conservation of Woman Power.*

Power—electricity, water or gasoline is being strongly urged. Many houses have been thus equipped in the past year. A continuous drive for labor-saving devices such as pressure cookers, fireless cookers, wheel trays, proper working levels and good grouping of working equipment is bringing very good results. A number of talks have been given at picnics, community meetings, and other gatherings on "Conservation of Woman Power" where statistics were given to show that this isn't something to talk about but something that must be done.

3. *Budgets.*

An expense account form for the rural woman was prepared with another form for the young girl, these forms being distributed and many have kept them faithfully although on the whole the project has been discouraging for the average country woman does not aim to be a modern financier.

4. *Practical Dietetics.*

Demonstrations in preparation and conservation of food are still given in many sections of Western Maryland. The district agent meets each woman's club two or three times a year giving a talk on Dietetics or Relation of Food to Health, giving them the latest discoveries of the research laboratories with the hope that sufficient interest is aroused to have them read for themselves and to apply to the daily menu what they have found out.

5. *Health and Sanitation.*

The women's clubs and community clubs in many localities have been persuaded to take the health and sanitation of the community as a club

problem. This has led to the placing of a number of sanitary drinking fountains, medical inspection, better ventilation and more efficient sewage disposal.

6. *Beautifying Farm Houses and Interior Decoration.*

By the use of pictures, slides and color plates many suggestions for the improvement of the farm home have been made graphic. This was given as a part of the Farmers' Institute program and carried to many sections of Western Maryland. Where possible the woman's club has selected an old, unattractive room for a club room, thereby using inexpensive materials the room becomes a picture in reality, showing what color harmony, balance, restfulness really mean. The girls' clubs have followed the same plan and have a number of attractive rooms.

7. *Recreation.*

Social features and entertainments were encouraged in all organizations. Girls' camps for the club members held in the summer, picnics, social evenings, holiday events, one club entertaining another has brought much enjoyment to the organized communities.

8. *Marketing.*

Very little has been accomplished in the way of curb markets but it is the plan to build each community show and county fair into an exchange. Much was done this year. The rural people exhibiting listed the products for sale with price, then the city women looked over the list and placed their orders. Many of the canned products of girls and women have been handled by giving names and addresses to people who inquire. In the seven western counties there are three women who have gone into commercial canning and are meeting with much success.

9. *Community Organizations.*

Community Club,
Woman's Club,
Girls' and Boys' Club.

In the seven western countries there are 43 community clubs, 22 women's clubs, and about 35 girls' and boys' clubs. More than 75 per cent. of these clubs have been organized one year or more and are learning the purpose and aim of co-operation, as a result there are many improvements due to their combined efforts. The community clubs have promoted the community exhibits, not only local but have made the community booth at the county fairs a real feature. They have consolidated the individual efforts and have worked out yearly programs bringing to them speakers who can help them with the subject at hand. They have added much to the social program of the communiy by giving picnics, parties and plays.

Of the 22 women's clubs, 12 have equipped themselves with pressure cookers, 5 have purchased Thrift Jar Sealers for use of club, 5 have circulating libraries, 4 have attractive club rooms, 2 have sewing machines and sewing days, 3 subscribe for good magazines and have them available for all club members. Practically all have done some social welfare work either in local community or somewhere else.

Hearing the Fine Points of a Dairy Cow.
—Photographed in Cooperation with States Relation Service.

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10. *Stimulating Interest in Exhibits and Fairs.*

Thirty-one community exhibits were held in the seven western counties, each one proving the growing interest and the educational value of these exhibits. Five county fairs were held and the community exhibits were a feature.

These exhibits are doing five things—

1. Showing the value of the right kind of seed and proper cultivation.
2. What is meant by a standard product.
3. Giving a market for ideas.
4. Giving the farmer a chance to advertise.
5. Encouraging healthy competition and rewarding honest effort.

11. *Farmers' Institutes and Short Courses.*

Attended 41 sessions of Farmers' Institutes, 7 short courses. A special feature this year was a short course for women held in Carroll County. This consisted of a two-day program with demonstrations and talks of interest to women. One day was given to Health and one to Thrift in the home. Women from all parts of the county attended and it was a decided success.

12. *Co-operation With Various Organizations to Promote Health and Social Welfare.*

Civic Clubs:
- Milk Campaigns,
- Surveys,
- Food Demonstrations.

District Nurses:
- Home demonstration agent and district nurse co-operate in helping each other to gain access to poor homes.
- Jointly arrange health exhibits and clinics.

Red Cross:
- Surveys,
- Co-operation in sewing classes held for factory girls.

Health Officials:
- Joint Programs,
- Health exhibits at county fairs.
- First aid instruction.

Schools:
- Club work,
- School improvements encouraged by community organizations,
- Surveys,
- Milk campaigns.

Commercial Concerns:
- Furnish exhibits free of charge,
- Give prizes and contributions to be used for exhibit awards,
- Milk companies donate milk used in feeding experiments in schools,
- Donated milk to be used at "Milk Bar" a feature of the county picnics this year.

Co-operated with factory superintendents to work with foreign element in the problem of Americanization.

Summary of Miss Day's Work

Traveled by rail	8,334 miles
Traveled by automobile	2,702 miles
	11,036 miles

Addressed 15,552 people.
Made 57 visits to Home Demonstration Agents.
Attended 41 sessions Farmers' Institutes.
Attended 7 Short Courses.
Attended 7 Community Meetings.
Attended 3 Grange Meetings.
Attended 29 General Meetings.
Attended 19 Women's Club Meetings.
Judged at 7 Community Shows.
Judged at 4 County Fairs.
Attended 2 Conventions.
Attended 10 Conferences of Fair Officials, Health Officials and School Officials.
Talked on 29 General Programs.
Talked on 7 Community Programs.
Talked on 3 Grange Programs.
Talked on 38 Institute Programs.
Talked on 8 Picnic Programs.
Gave 7 Dietetic Lectures.
Gave 58 Demonstrations.
- 1 on Bread Making.
- 6 on Meat Canning.
- 3 on Use of Apples.
- 16 on Home Millinery.
- 25 on Home Dressmaking.
- 5 on Home-made Dress Forms.
- 2 on Testing of Fabrics.

Special Features

Representative for Extension Staff at New York State Fair.
Attended State Agricultural Society Convention at Salisbury
Attended State Grange Convention at Frederick.
Attended Two Girls' Camps.
Assisted in Two Fashion Shows.
Assisted in Arranging Ten Clothing Exhibits.
Arranged Two Clothes Clinics.
Assisted at Dairy Show in Baltimore.
Assisted with Three "Milk Bars."

From the Annual Report of Margaret Schmidt, District Agent in Southern Maryland

Organization:

Advisory councils in Charles, Anne Arundel, St. Mary's and Harford counties. Women's clubs in Charles, St. Mary's and Harford counties.

Egg Circles and Co-operative Buying and Selling of Poultry in Charles, St. Mary's and Anne Arundel counties.

Milk Increased Production and Consumption:

Campaign for a cow on every farm in "tobacco counties."
Campaign for retaining sufficient milk and cream for home use in dairy counties.

By Means of—
Milk exhibits at fairs.
Demonstrations of how to use milk in diet.
Talks on value of milk and butter as food.
Encourage use by children through school lunches.

Budgets:

Talks on keeping household accounts.
Distribution of "expense account forms for farm women."

Clothing Thrift:

Demonstrations in renovation and remodeling of old clothes.
Demonstrations in making and remodeling hats at home.
Talks on "How to Buy Clothes."
Demonstrations of Short Cuts in Sewing.

Pure Bred Poultry:

1. Short courses in poultry raising for women in Charles, St. Mary's and Anne Arundel counties.
2. Poultry exhibits at county fairs and community shows.
3. Encouraging club girls to raise pure bred stock.
4. Aid from banks in poultry projects.
5. Organization for selling (see organization project).

Fairs and Shows:

1. Campaign to increase number of community shows.
2. Instruction to public on standards for judging exhibits.
3. Increasing educational exhibits.

Home Improvement:

1. Rearrangement of kitchens.
2. Water supply inside house.
3. Exhibits of labor-saving devices at fairs.
4. Illustrated talks on home-made labor savers.
5. Demonstrations in improvement of home grounds.
6. Demonstrations of pressure cooker meals.

These problems have been attacked somewhat in the order given. One or two have been left untouched and none of them have been completely covered.

1. *Organization.*

The work of organization of rural communities in Southern Maryland has been slow for a number of reasons. First, the people are altogether unaccustomed to working in groups, and are only beginning to see the value of organized effort. Second, distances are great and population sparse in many counties; and third, poor roads make travel practically impossible in remote districts during the winter and early spring months. Nevertheless, about eight new working community organizations have been formed in the district. Several old organizations have been rejuvenated. Furthermore three counties—Charles, St. Mary's and Harford have completed county-wide organizations of farm men and women, known as county farmers' federations. Montgomery and Prince George's counties already had organizations which served the same purpose as these federations, leaving only Anne Arundel county as yet unorganized on a county basis.

Perhaps the most systematic plan for organization was carried out in St. Mary's county where an "organization week" was held. During this week one meeting was held in each district of the county for the purpose of forming a local community club. Each of these clubs elected its own officers, six delegates, three men and three women to the county federation. On the last day of the week a mass-meeting of these delegates and any other interested persons was held at the county seat and the county farmers' federation was formed with its own officers and one delegate to represent the county in the State Agricultural Society. These local and county organizations will consider such problems as roads, schools, marketing, home improvement, crop improvement, etc. As a rule the agricultural committee of the county federation serves as an advisory council to the county and home demonstration agent.

One very encouraging feature of the organization work has been the formation of women's clubs in two of the most backward counties. These new clubs have been formed in the past few months and requests have come to the home demonstration agents for the formation of three more. These women's clubs frequently exist side by side with a community club as the women have felt that there were more problems of interest to them than could be taken up at the regular monthly meetings of the community clubs.

In this organization work it has been the part of the district agent to aid in the actual process of organization, to help outline programs of work, and to help carry out programs through demonstrations and talks.

2. *Thrift.*

Thrift in clothing has been strongly emphasized this year. At farmers' institutes, picnics, etc., exhibits of remodelled clothes and inexpensive home-made clothes have been made, and talks and demonstrations in the renovation and remodelling of clothes have been given. The demonstrations have generally taken the form of "work days" at which time the women of a community meet together with the Home Demonstration or District Agents, bringing with them old clothes or hats to be made over. The remodelling was actually done at these meetings by the women themselves under the direction of the agents, with the result that hundreds of dollars in clothing costs have been saved by the women. One home demonstration agent who has kept rather an accurate account of the value of remodelled clothes in her country estimates saving of $830.90 through these demonstrations alone. At least one other county in the district has made quite as good a showing.

Interest in the clothing exhibit thrift project was greatly stimulated by the fashion show held at the State College on Farmers' Day. One county is planning to hold a clothing thrift competition at the next regular meeting of the Pomona Grange at which prizes will be awarded for the best remodelled garments and hats. Several very successful demonstrations in short cuts in sewing have been given by the home demonstration agents and the clothing instructor of Home Economics Department of the State College.

3. *Home Conveniences.*

At farmers' institutes, women's club meetings, etc., talks have been given on labor-saving devices, lantern slides have been shown and demonstrations in the use of the devices have been given. A very successful method of introducing the smaller devices into our farm homes has been the exhibits of these devices at county and community shows. One of the department stores in Washington has been more than generous in sending out to our rural communities exhibits of such labor-saving devices as we have selected, with permission to sell any of the articles shown. The actual sight of the articles has proved such a temptation to the women that in one instance almost the whole exhibit was sold in an afternoon and night, and there were often two or three bidders for the same article.

4. *Nutrition.*

A series of five lessons in "What you should know to plan healthful, economical meals" was given to one women's club by the district agent and many talks on the general topic of nutrition have been given by the home demonstration agents. Perhaps the most extensive piece of nutrition work has been done in the girls' clubs. In practically every county girls' club members have received instruction in one form or another, in the importance of proper food. Most often this has been worked out through the school lunch project, but sometimes it has been done through regular lessons in meal preparation or personal hygiene. The subject of food is a very difficult one to take up with the women of this section, and yet it sometimes seems that instruction given along this line to the children is of little value unless it can be intelligently given support by parents at home. For instance, in one school where every club member was able to write a very intelligent paper on why milk is an important food for children, and was also able to prepare some milk dishes, it was found that not one of them was drinking a drop of milk because through the ignorance of the parents to the importance of milk there was not a family among them that had a cow.

5. *Milk Campaign.*

Closely connected with the problem of nutrition has been that of milk consumption. At least five of the Southern Maryland counties will never become "dairy counties," but it has long been apparent that there is a great lack of even a normal number of dairy cattle in these counties. In order to ascertain just what the conditions are, and where they are worst, a survey has been or is being conducted in every county, by the home demonstration agent of the amounts of milk and milk products produced and consumed on the average farm. This survey is being conducted on 100 farms in ten different sections of each county. When all the surveys have been completed a campaign for increased milk consumption and more economical milk production will be carried on in each county. The campaigns will vary somewhat in nature in the different counties but will probably be along the general lines suggested in the attached outline.

Several counties have already begun their campaign of education in the value of milk as a food by having milk drink bars at the county fairs or community shows, by demonstrations in ways of using milk, by weighing children preparatory to beginning milk-feeding experiments, and by joint meetings of men and women at which both the production and consumption of milk has been discussed. It is hoped that these campaigns will be of value not only from the standpoint of improving general health through increased consumption of milk, but that they will also tend to improve general farming in our southern counties by the introduction of more and better live stock.

6. Practically all of the months of October and November have been devoted to helping plan and judge county and community agricultural shows. Every effort has been made this year to increase the educational value of these shows by the introduction of new types of exhibits (home conveniences, clothing, thrift, etc.,) by revising premium lists and by conducting the judging of exhibits—so far as was practicable as an open demonstration, explaining the points on which the various products are judged. The quality of products exhibited has in most instances shown a marked improvement over last year.

Anne Arundel county held besides a number of community shows, its first county show since 1889, and no one was more surprised than the county people themselves at its success. In several instances in all the counties this year's community show has been the first attempt of the community to "put something through" as a community, and the spirit developed through this project has so impressed the people themselves that it has much more than paid them for all the effort expended in arranging for the show.

7. *Miscellaneous.*

Some progress has been made in the matter of county appropriations for home demonstration work this year. Only one county where an appropriation was asked for failed to make one, and that was through no lack of urging from the people of the county. Three counties increased their previous appropriations by one or two hundred dollars, one by about six hundred and one which had never given an appropriation before gave $500 this year. All this would indicate a general increase of appreciation of the value of home demonstration work.

Summary

Farmers' institutes or short courses	5
County fairs	2
Community shows	17
Visits to counties	86
Demonstrations	12
Talks to adults	18
Talks to girls' clubs	24
Conferences with agents	39
Miles traveled by rail	3651
Miles traveled by auto	3962
Miles traveled by boat	153
Miles traveled by team	52
Total meetings attended	124
Estimates total attendance	5867

Girls' Club Work.

While the Girls' Club Work is a coördinated part of the Home Demonstration work for purposes of administration and results, Miss Adice S. Jones, Assistant Club Leader, is charged with supervising this phase of the work in the counties. The project has been prosecuted along the following lines: first, extending club work by means of the coöperative school plan adopted in September, 1919; second, to still further develop club work by bringing the work before the people of the community; third, formation of Junior County Organizations; fourth, county camps and picnics; fifth, State club work; sixth, county short course for girls; seventh, thrift and savings among girls; eighth, to continue bringing about more definite results in club work, at the same time standardizing the work throughout the State in gardening, poultry, canning and other cookery, household furnishing, sewing, millinery, expense accounts and budgets.

The summary for Girls' Club Work will indicate the results accomplished in the above lines of work during the year.

To give an idea of the scope and accomplishments of the Girls' Club Work, I cite the following statements taken from an address delivered by Miss Laura Amos, a Girls' Club member of Harford county before the meeting of the Maryland Agricultural Society, Salisbury, Md., November 10th, 1920, entitled, "What Girls' Club Work Means to Me."

* * * "There are many names for the girls' clubs, but here in Maryland we call them the Junior Home Makers' Club. Our motto is to make the best better; that is, no matter how well we do our work, we strive each time to do it better. Our emblem is the four H's, which stand for head, hand, health and heart. And what does it mean? It means a head to think, to plan, to reason; a heart to be kind and true and sympathetic; hands to be helpful, useful and skillful, and a health to resist disease and enjoy life. That is our emblem, and the older clubs have one more H, which sands for home. There are many aims of work of the girls' clubs, principally to teach gardening and canning of vegetables and fruits for the market and for home use; to teach profitable farm and home dairying; to utilize the surplus farm labor; to provide means for a girl to earn money at home; to pave the way for practical demonstration in home economy; to stimulate cooperation among members of the family and community, and to correlate home work with school work. These are the aims of our club, but in general I might say that the general aim of the club work is to teach girls the most efficient and easiest way to make a real home. And how many know what a real home is? It is not merely a house in which people live, but it is a world of love shut in and a world of care shut out. That is the real home, the one the girl members of the club are trying to make. In Harford county the first demonstration agent was placed there about five years ago to train the girls. Since then the work has spread very rapidly. In 1916 we had 177 club members in Harford county and now we have over 500.

In 1915 we had only seven girls' clubs in Harford county and now we have thirty-two. That shows how the work is growing, and not only in Harford county but all the counties of the State. In Harford county we have achieved many things, especially in the last few years. At the present time we have fifteen school kitchens, where the girls have sufficient equipment to cook, to can, preserve, bake bread or do any other work that would be done in the kitchen at home. We had nine clubs in the county last winter that sold hot lunches, which not only benefited the high school student, but enabled the girls to make money. We had seventeen short courses in Harford county last year for the girls in canning, cooking and millinery and all the other work that goes with the club. Thirteen girls from Harford county attended the short course given at College Park this summer, which outnumbered the girls from any other county in the State of Maryland. We had a club picnic this fall at

which 500 club members were present and over 200 adults, which shows that the older people are pleased with our work; but we are most especially proud of Harford, because it was the first county in the State to organize a county club federation, which we did organize this past fall. In the future our club work will be with the older people. Already they are interested in the work and are willing to join a club like ours that they may have an expert demonstration agent to teach them the better and easier methods of making a real home. It was just last week that a little ten-year-old girl ran up to our demonstration agent and said: "Why, Miss Gittinger, what do you think? I have an aunt that graduated from the State Normal School, and the other day she was making braid and wanted to put tassels on it and didn't know how and had to get me to show her." So you see, when the families find the girls are doing work that they don't perhaps have a chance to learn in school, they will be interested in the work and will want to join a club, too, just like the girls and boys have now. We are being trained that we may be ready to take or step into the places of the older people as they vacate them." * * *

* * * "Now I have told you how the work started in the Southern States, what has been achieved in Harford county and what the work will mean in the future. Now I am going to tell you what the work means to the individual girl, what it has really meant to me. In the home the girl is taught practical canning, sewing, cooking, which can be practiced at home almost every day in the year. She is taught poultry raising and gardening, which it is every girl's duty to learn. I don't mean to put bad notions into boy's heads but it is really the girl's place to help in the garden and home. She is taught millinery and bread making, which every girl should understand, as it is the career in life for her; home decorations, which mean attractive furnishings in the home; personal hygiene, which is considered so important now that it is even taught in nearly all the public schools in the State; and the keeping of accurate expense accounts from day to day as a necessary part of our day's work, which is a training and education in itself. These are the benefits that a girl gets individually from club work; that is, they can practice at home and at school—each individual is enthused with the spirit to work, to work for the club and to work for the home. Our school has one club member who was so determined to raise a club garden that after begging her father, who kept telling her he needed every foot of land for his own use, she at last persuaded him to give her the family garden spot that she might raise a garden of her own, with the understanding that if she failed to raise a garden the family might be compelled to go hungry; but she went to work with a determined spirit that means success, and not only did she feed the family all summer from her club garden, but canned 300 containers of tomatoes and cleared $90.00 besides. In the same school we had another girl so successful with poultry one year, when she sent the record to the agents and the specialists from the State College they could not believe it, but after being assured by the principal of the high school she attended that whatever she did was perfectly all right, they said she deserved the State prize. Those two examples are two very good examples of the true club spirit that every girl has. Many people consider money making the most important factor in life, but it is not by any means the most important. Home making is the most important factor in life the whole world over. People are coming to the point where they realize that boys and girls are far more valuable than cows and pigs.

"When Dr. Knapp appealed for club work, he said no young woman is half educated who is not educated in the knowledge of household economics, especially in preparing food and clothing and the orderly arrangement of the household and the knowledge of management of domestic affairs and the knowledge of plants and trees needed for useful and ornamental purposes. That is Dr. Knapp's idea of women's education, and the time has come when club work is considered an important part of every girl's education, just as her regular studies in school. It has come to the time when we do consider it a necessary part, and every girl will have a chance to join a club and be a club member. * * *

* * *"In the community the individual girl is being trained to be a leader. Leadership is being developed all over the State among the club boys and girls. It is educational, and it is not only helping the individual girl, the school and the county, but it is helping the whole country. In the past world war the girls helped the country by canning and preserving the food, by making and sending clothes to the soldiers and orphan children, by helping the Red Cross and backing the country financially with thrift stamps, war-savings stamps and Liberty bonds. So you see the club work is not only helping the girl, the school, the county, the State, but the whole country. I have only talked to you now about the girls' club work, because Mr. Pearce will talk about boys' club work, and I have told you only what has been achieved in Harford county and in my school and for me; but I want every one here to understand the need and the importance of having a Junior Home Makers' Club in every locality in the State of Maryland, and anyone who questions the need or the necessity for a Junior Home Makers' Club is wholly ignorant of the aims and purpose of the all-important field which the work occupies in the building of the lives and

fortunes of the future generations in the rural districts. I hope everyone will try to help the clubs in every way they can."

Milk Campaign.

During the past year much emphasis has been placed upon the food value of milk from healthful and economic standpoints with a view of increasing its consumption among all classes of people. Demonstrations and lectures on the food value of milk, the care of milk and milk dishes have been staged at community shows, community picnics, county fairs and lawn fêtes. Girls' clubs all over the State have given the "Milk Fairy Play," and this little play has done much to teach the children the food value of milk and enticed them to drink more milk at home.

Demonstrations in milk booths and selling various milk drinks have been most popular. More than 20,000 milk drinks have been sold by our agents at various public events. The first milk booth in the State and the first "Milk Fairy Play" was staged at Westminster last November under the supervision of Miss Everett, the County Home Demonstration Agent. Since that time the project has been conducted in many parts of the State.

Negro Work.

Due to limited funds, only one colored agent has been employed during the past year. This Agent, Miss Woodson, has done splendid work in Southern Maryland, especially Charles county. There were fourteen Girls' Clubs and eleven Women's Clubs. The agent visited 23 out of the 30 colored schools in the county. The principal work of the agent lay in arousing the colored people to better habits of life, better homes and a better citizenship. The agent reports the most fruitful results in the demonstrations for fixing homes and rooms by the girls and women. One colored club girl cleaned and fixed over the whole home after the beginning of the campaign. This girl, Susie Duckett, papered two rooms, painted three and purchased a kitchen cabinet with money earned by her club efforts.

Summary

The following summary of all Home Demonstration Work is submitted by Miss Kellar:

Consultations at home or office	9,531
Visits to demonstrators, homes, schools and clubs	4,660
Bulletins distributed	21,065
Letters written	19,538
Meetings held	3,366
Miles traveled	86,023
Number of exhibits, fairs, poultry shows, etc	107
Number of women influenced by home demonstration work	14,392
Demonstrations given by agents to groups of women	991
Utilization of Vegetables	61
Dairy Products	51
Poultry Products	62

Secretary of Agriculture Greets Maryland Boys' and Girls' Club Members.
—Photographed in Cooperation with States Relation Service.

Bread making	60
Child Feeding	133
Invalid Cookery	19
Cookery under steam pressure	125
Fireless cooker	46
Canning	140
Drying	28
Brining	5
Laundry	13
Clothing	139
Home conveniences	49
Kitchen arrangement	27
Improving home grounds	33
Total demonstrations given	991
Estimated total attendance of women at demonstrations	12,487
Number of women giving demonstrations	358
Number of women making bread under direction of home demonstration agents	383
Number of bread exhibits	91
Number of gardens grown	661
Number of cans of meat put up	3,443
Number of pounds of lard made	65,500
Number of gallons of vinegar made	4,480
Number of demonstration centers established	7
Number of women keeping household accounts	234
Number of labor-saving devices installed	179

Girls' Work.

Number of girls enrolled in poultry work	868
Number of girls enrolled in garden work	269
Total number of containers canned from 1/10 acre gardens	21,381
Value of crops raised on 1/10 acre gardens	$6,768.77
Number of girls' clubs	240
Total number of girls enrolled	4,099
Number of girls completing first-year work	800
Number of girls completing second-year work	291
Number of girls completing third-year work	100
Number of girls completing fourth-year work	5
Total number of certificates to be awarded to girls	1,196
Number of State short-course scholarships awarded	3

Home and Yard Improvement.

Number of fences repaired	19
Number of trees planted	4
Number of shrubs planted	24
Number of outbuildings repaired or removed	9
Number of lawns planted	15
Number of planting of flowers	49
Number of demonstrations following plan of improvement for home	32
Number of new houses built	2
Number of houses remodeled	12
Number of lighting systems installed	27
Number of heating systems installed	131
Number of water systems improved	23
Number of kitchens improved by:	
Rearrangement	52

Secretary of Agriculture Greets Maryland Boys' and Girls' Club Members.
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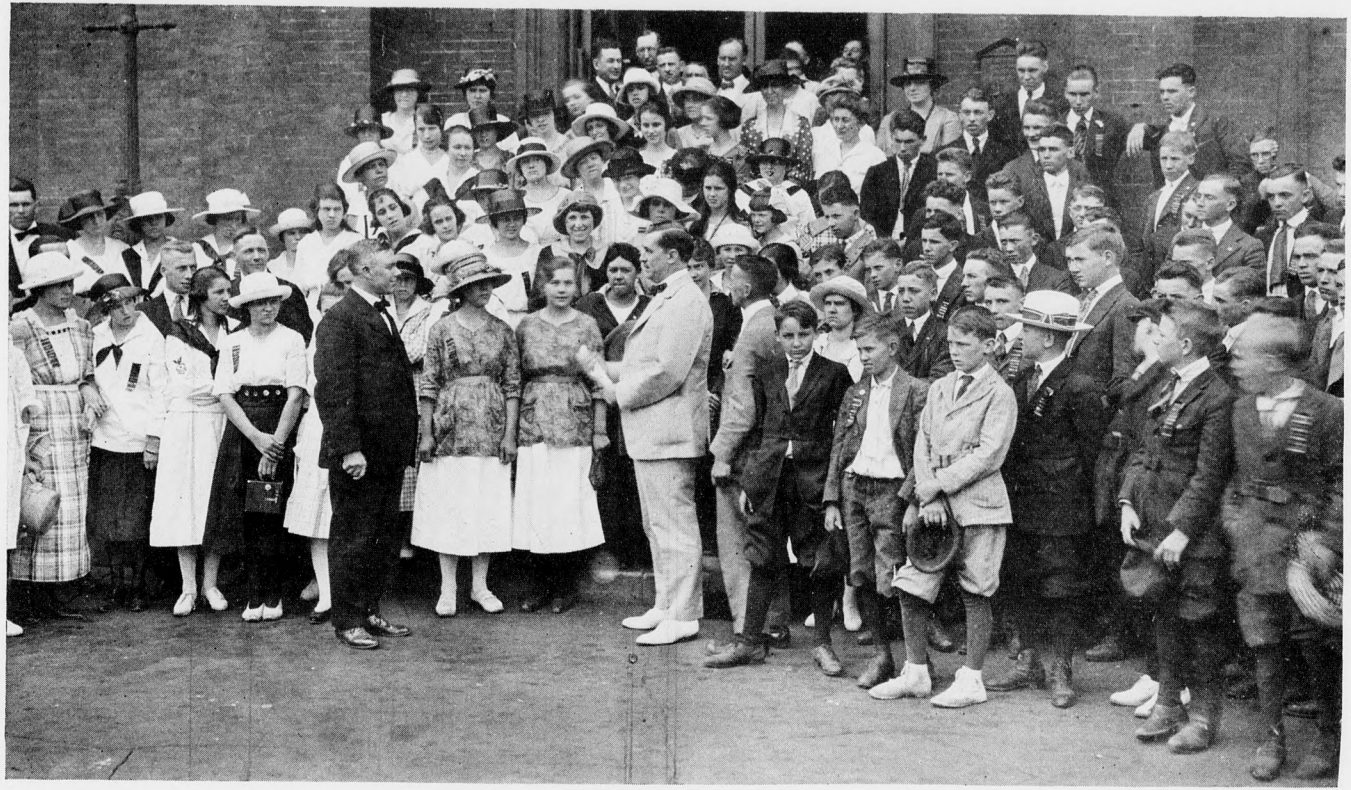

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Secretary of Agriculture Greets Maryland Boys' and Girls' Club Members.
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Screening	6
Improvement of floors	22

Summary of Report of District Agents and Specialists.

Number of meetings attended	243
Total estimated attendance	24,991
Number of visits to agents	180
Number of demonstrations given	133
Number of miles traveled	32,931
Number of exhibits judged	58

Summary of State Home Demonstration Agent's Activities.

Number of counties organized	20
Number of county agents employed	23
Number of colored workers employed	1
Number of urban workers employed	1
Number of county agents employed full time	20
Number of miles traveled by State agent	12,424
Number of meetings attended by State agent	89
Approximate attendance	18,177
Number of official letters dictated	3,103
Number of demonstrations given by State agent	19
Number of visits to county and urban agents	53

Results of Special Questionnaire.

Number of style shows held	11
Number of demonstrations in short cuts on sewing	135
Value of saving from clothing demonstrations and exhibits	$1,080
Number of milk campaigns held	11
Number of milk booths	23
Number of milk drinks sold	31,360

Boys' Club Work.

Mr. E. G. Jenkins, State Boys' Club Agent, has now devoted a year to this work. He has been ably assisted by Mr. P. W. Chichester. The Boys' Club Work is making splendid progress, as is revealed in the report submitted by Mr. Jenkins. I cite the report practically in full:

"The outstanding fact in boys' club work in Maryland in 1920 is that a state-wide organization of farmer boys has developed and has become recognized by every important element in our commonwealth as an organization of boys rather than as an activity that boys may avail themselves of.

"It was organized boyhood, actively engaged in productive labor and in the first stages of ownership, to which the State bankers awarded funds for inspirational activities. It was organized boyhood to which the Timonium State Fair officials offered opportunity to display their pure bred stock, and to contest in dairy judging. It was organized boyhood which was recognized by the State Agricultural Society and others. It is organized boyhood which will more and more realize its opportunities and achieve big things in the program of improving farm practices and in making rural community life attractive and wholesome. The most important forward step in club work has been the development of this team work.

Better Live Stock.

"Starting but two years ago in one or two counties the pure bred pig club work among club members has found a steady and safe growth all over the Ssate. How far this work is influencing improvement in selection of breeding stock is impossible to say but the fact that scores of well-selected sires have been bought by boys and the equally interesting fact that many fine individuals have been registered and sold by club members to adults, indicates the splendid start.

"In 1919 eighty club members purchased pure bred pigs in Harford County. This number was increased by 130 this year. About 140 pigs were displayed at the Harford County Fair this year by club members and all but one award in the swine contests were carried home by boys.

"Worcester County boys had a remarkable display of pure breds at their county fair also. In smaller numbers, but with excellent effect exhibits of registered pigs were made in other counties and at many local fairs and shows.

"Eighty pigs were sent to Timonium from all parts of the State and the exhibit was an object lesson to hundreds of farmers, instructive to thousands of urban visitors and received favorable comment in papers and periodicals in this and other States.

"An interesting and valuable report will be made later on an instance where a crooked-legged mother pig sent crooked-legged off-spring over considerable territory. So far as is now known, every boy who purchased one of this family for breeding purposes has willingly consigned his otherwise fine individuals to the pork barrel. We have lost a family of pure bred crooked-legged pigs but we are gaining a bunch of straight, well-bred citizens.

"So far as reported by county agents, every note given to banks by boys for the purchase of pigs has been taken care of.

"This fall the first sizable effort to promote pure bred dairy calf club work was inaugurated. Impetus was given to this phase of club work when judging teams from 16 counties contested at the Timonium Fair.

"A number of boys have raised dairy calves in this State each year but recently 35 club members in Harford County. many of them aided by local banks, purchased Jersey and Guernsey pure breds costing all the way from $125 to $250 each.

Improvement of Soil Fertility and Cultural Methods.

"In many quarters boys are being led to give attention to crop rotation, cover crops and the like. A number of boys have had soil tests made and following the advice of county agents have enjoyed increased yields per acre.

"Several boys who have passed beyond the 18-year age limit report that they are now raising pure bred seed corn commercially. A direct result of successful club work. Improvement in selection of exhibits for community, county and State shows is everywhere remarked and there is not the least doubt that this is a direct outcome of club instruction. One of the most interesting cases is that of a club member who displayed a fine selection of

A Demonstration in Cultivating Corn.
—Photographed in Cooperation with States Relation Service.

potatoes this fall. These potatoes were free from disease and gained such a local reputation that the best of the yield sold for seed at $5.00 a bushel when potatoes were $1.00 a bushel in the wholesale markets.

Developing Community Co-operation.

"One of the greatest achieving impulses governing boys is that of "belonging." The "gang spirit" can be utilized for great and good things as easily as it may, without proper directions, lead to viciousness. It is to this belonging instinct and all that it drives a boy to do when he "runs with the pack" that we must look for our approach to the method of securing independence and self-determination and self-reliant action in club work.

"The organization of clubs on the 4-H. plan has received attention. This lends itself to a program that appeals, one that initiates all that a boy does. Where there appears to be a field ready for such affairs clubs are being organized on the order of junior community clubs with a definite object of the development of the head, the heart, the hands and the health. An example may be found at Hurlock, Dorchester County, where 29 boys and girls attended the first meeting and enthusiastically organized for a broad program of work and pleasure.

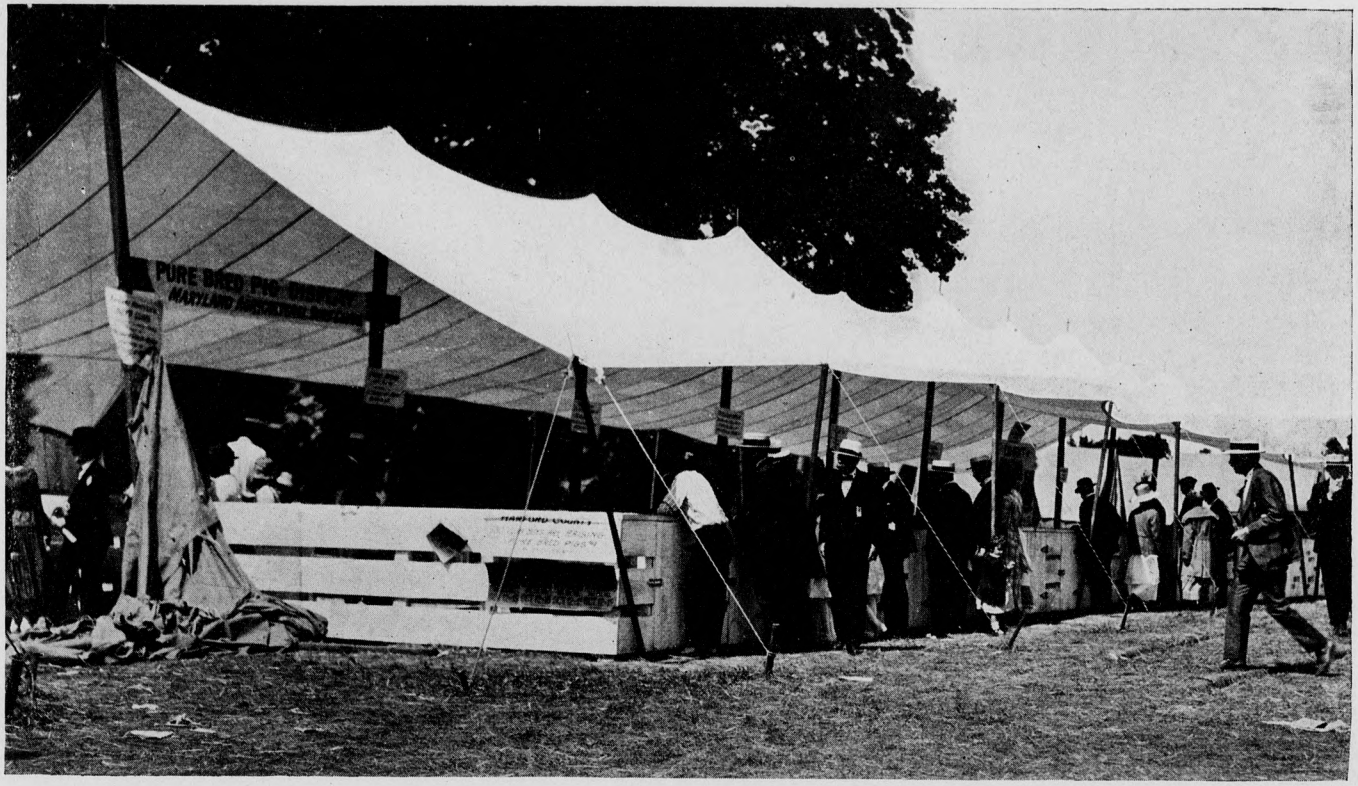
"The clubs in Harford County have been going forward along the same lines. The proof of the inspiration that comes from developing the club spirit is best shown in that county. Twenty-eight boys and thirteen girls came from Harford to the State Boys' and Girls' Club Week at the University of Maryland. Their enthusiasm was everywhere apparent. They were thoroughly mixed with club members from other counties in the groups, and their spirit was contagious. The remarkable development in Harford County is due to the manner in which the county agent has made use of the "gang spirit." In September a club picnic was held in the county where over 500 club boys and girls and 200 adults enjoyed a wonderful meeting. Over one thousand club members (boys and girls) in Harford County organized as a county federation of boys' and girls' clubs, have selected four boys and four girls as delegates to the adult county farm federation.

"Clubs have on a number of occasions occupied the lecturer's hour at Granges and have appeared before community clubs with formal club meetings.

"Splendid addresses were made by club boys at the State Horticultural meeting in New Windsor and at the State Agricultural Society meeting in Salisbury, as well as at county federation meetings.

Boys' and Girls' Club Week.

"Through the hearty co-operation of Judge Frank I. Duncan, of Towson, chairman of the Agricultural Committee of the State Bankers' Association, the banks of Baltimore placed a fund of $2,000 at the disposal of the State agent for awards and inspirational work. This made possible the most delightful program at the University the first week in August. One hundred and ninety-six boys and girls from all parts of the State were brought in by leaders. Organized into groups they attended demonstration instruction classes in the morning, had group games and visited the aeroplane mail field in the afternoon and had inspiring meetings in the evenings. On Thursday special electric cars took them to and about Washington, where they met and were addressed by Secretary Meredith; visited



Boys' Club Pig Exhibit at Timonium Fair. 100 Pure Bred Pigs Shown.

Boys' Club Pig Exhibit at Timonium Fair. 100 Pure Bred Pigs Shown.

Canning Demonstration by Girls and Girls' Clubs at the University.
--Photographed in Cooperation with States Relation Service.

the Department offices, the old Museum, the Congressional Library, and then enjoyed a boat trip to Mount Vernon. Everyone declared this the most wonderful day ever experienced. Due to the plan of grouping the entire responsibility of each individual rested upon his own shoulders and the result was expressed by an official on the boat who said, "I have been on this boat many years and have seen many parties of boys and girls. This is the best behaved group I ever saw."

Tri-state Camp.

"Preparations for boys to attend Timonium Fair both as exhibitors of pigs and on judging teams, interfered with the efforts to secure boys for the leaders' training camp at Grottoes, Virginia. Nine boys attended this camp, however, and each made a splendid record. This was undoubtedly the most significant training camp for junior leadership in club work ever provided for farmer boys. State winners attended this as their award, an opportunity provided by the bankers' fund.

County Camps.

"Forty club members from Allegany and Garrett counties camped on the south branch of the Potomac during the second week in August, and, in spite of constant rains, had a happy and helpful experience. In addition to the usual camp activities and demonstration instructions, a study of trees, under the leadership of Professor Norton, and travel stories by Professor Pierson, of the University, were greatly enjoyed.

"Washington County boys again enjoyed the Big Pool Camp where Assistant State Boys' Club Agent Chichester directed their activities. Probably the most interesting feature of this camp was a hike which will long be remembered by all the boys in the party.

Timonium Fair and the National Dairy Show.

"Displaying 80 pure bred pigs at Timonium brought nearly every boy owner to that educational enterprise, through the munificence of the Fair Association. Sixteen judging teams of three boys each and county agents from all but two counties represented, attended through the same kind services. Tents loaned by the National Guard of Maryland were equipped with cots, mattresses and blankets were borrowed from the Department of Labor, and the boys and officials enjoyed several days' outing on the Fair Grounds. About one hundred boys met Governor Ritchie at the gate on Governor's Day and escorted him to headquarters. Later in the day the Governor, with his party, visited the clubs' swine exhibit.

"The dairy cattle judging work, which had been arranged by Dairy Specialist Wolcott, occasioned enthusiastic comment from officials of the fair and visitors alike. So close was the competition that six boys stood high enough to contest for the team of three to represent Maryland at the National Dairy Show in Chicago.

"Joseph Hoopes and Charles R. Davis, of Bel Air, and Chauncey Ahalt, of Middletown, were finally selected, competing with boys from the great dairy states, and won fourth place in all breeds and secured in all five prizes.

Inspiring Boys to Remain on the Farm.

"All this work has been of great inspiration. One boy said recently "I was planning on going to the city but after that wonderful club week at College Park I have decided to finish high school and then enter the Agricultural College." Another said, "I secured a good job on the railroad

Judging the Jerseys at Timonium Fair.

the Department offices, the old Museum, the Congressional Library, and then enjoyed a boat trip to Mount Vernon. Everyone declared this the most wonderful day ever experienced. Due to the plan of grouping the entire responsibility of each individual rested upon his own shoulders and the result was expressed by an official on the boat who said, "I have been on this boat many years and have seen many parties of boys and girls. This is the best behaved group I ever saw."

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"Preparations for boys to attend Timonium Fair both as exhibitors of pigs and on judging teams, interfered with the efforts to secure boys for the leaders' training camp at Grottoes, Virginia. Nine boys attended this camp, however, and each made a splendid record. This was undoubtedly the most significant training camp for junior leadership in club work ever provided for farmer boys. State winners attended this as their award, an opportunity provided by the bankers' fund.

County Camps.

"Forty club members from Allegany and Garrett counties camped on the south branch of the Potomac during the second week in August, and, in spite of constant rains, had a happy and helpful experience. In addition to the usual camp activities and demonstration instructions, a study of trees, under the leadership of Professor Norton, and travel stories by Professor Pierson, of the University, were greatly enjoyed.

"Washington County boys again enjoyed the Big Pool Camp where Assistant State Boys' Club Agent Chichester directed their activities. Probably the most interesting feature of this camp was a hike which will long be remembered by all the boys in the party.

Timonium Fair and the National Dairy Show.

"Displaying 80 pure bred pigs at Timonium brought nearly every boy owner to that educational enterprise, through the munificence of the Fair Association. Sixteen judging teams of three boys each and county agents from all but two counties represented, attended through the same kind services. Tents loaned by the National Guard of Maryland were equipped with cots, mattresses and blankets were borrowed from the Department of Labor, and the boys and officials enjoyed several days' outing on the Fair Grounds. About one hundred boys met Governor Ritchie at the gate on Governor's Day and escorted him to headquarters. Later in the day the Governor, with his party, visited the clubs' swine exhibit.

"The dairy cattle judging work, which had been arranged by Dairy Specialist Wolcott, occasioned enthusiastic comment from officials of the fair and visitors alike. So close was the competition that six boys stood high enough to contest for the team of three to represent Maryland at the National Dairy Show in Chicago.

"Joseph Hoopes and Charles R. Davis, of Bel Air, and Chauncey Ahalt, of Middletown, were finally selected, competing with boys from the great dairy states, and won fourth place in all breeds and secured in all five prizes.

Inspiring Boys to Remain on the Farm.

"All this work has been of great inspiration. One boy said recently "I was planning on going to the city but after that wonderful club week at College Park I have decided to finish high school and then enter the Agricultural College." Another said, "I secured a good job on the railroad

Judging the Jerseys at Timonium Fair.

when school was out. The boss gave me a week off to attend club week. Then I asked for a week to attend the Tri-state Camp. First I thought I was going to lose my job but when I told the foreman all about it, he promised to give me vacation work enough each year to help me work my way through the Agricultural College." One lad went home from club week and prevailed on his father to buy a tractor. This led the mother to secure an electric plant with lights, running water, washing machine and the like. The boys' club at McHenry, Md., raised money by socials and entertainments and purchased a club potato spraying outfit at a cost of $150.

Enlisting Supporting Interests.

"The State Bankers' Association unanimously voted a committee which secured $2,000 from Baltimore City banks for inspirational work.

"County banks all over the State have been most anxious to co-operate, have financed pure bred live stock work and given splendid awards. One of the principal addresses at the semi-annual meeting of the Tri-County Bankers' Association in Crisfield was given by Judge Frank I. Duncan on Club Work.

"Splendid awards nave been made by the Tri-State Canners' Association, the Tilghman Fertilizer Company, the Baltimore Canned Goods Exchange, the Timonium Fair Association, several Pomona Granges, county farmers' federations and county fair associations.

"Rather than give boys awards in the shape of money, every effort is being made to use the money for inspirational and educational purposes in the development of local and State camps and for paying the way of boys who have achieved most.

"It was interesting to observe that more than half the rural teachers attending summer school at the College asked for the "Club Work Course" offered there. The State agent was invited to meet the teachers and a number of clubs were organized among them, and instructive and interesting programs were carried out.

"Twelve counties worked under written agreements between county agents and county superintendents and much valuable assistance has been given to club work by county school officials as well as teachers.

Summary of Club Activities

Enrollment.

1.	Enrollment	1,702

Values.

2.	Total complete reports	765
3.	Total value complete reports	$45,873.79
4.	Total estimated value uncompleted demonstrations	$120,551.10

Averages.

5.	Average yield of corn per acre	76.65 bushels
6.	Average cost of corn per bushel	$0.41
7.	Average yield of potatoes per acre	193.76 bushels
8.	Average cost of potatoes per bushel	$0.56

9. Average cost of fattening pig per pound..... $0.123
10. Average cost of growing pig per pound..... $0.169
11. Average cost of sow and litter per pound..... $0.08
12. Average cost of dairy calf per pound..... $0.26
13. Average cost of poultry per pound..... $0.14

Summary of Agents' Activities

1920

Number of miles traveled by assistant boys' club agent	8,594
Number of miles traveled by boys' club agent	11,576
Number of personal visits to schools or clubs for organization and instruction work by club agents	487
Number of meetings attended by State agent	169
Approximate attendance	20,267
Number of meetings attended by assistant boys' club agent	78
Approximate attendance	2,210
Number of official letters dictated by State boys' club agent	2,712
Number of demonstrations visited	125

Agronomy.

The project in Agronomy, which is supported by Smith-Lever funds, is in charge of F. W. Oldenburg. His work is supplemented by specialists in the College and Experiment Station, Prof. J. B. Wentz and Prof. J. E. Metzger, and Dr. A. G. McCall.

Mr. Oldenburg reports the following lines of work that have been followed the past year:

1. Cooperating with the county agents in regard to demonstrations in crops and soil fertility, including those in corn, wheat and other grains, grasses, soy beans and cow peas, vetches, alfalfa and other legumes.
2. Cooperating with the county agents and the experiment station in demonstrations in lime and fertilizers and to bring about a more general use of lime.
3. Bringing about a more general growing of high yielding, pure bred wheats in Maryland.
4. Bringing about a more general growing of soy beans, especially the varieties best adapted to Maryland conditions.
5. Bringing about better methods of tillage and cultivation and better crop rotations, to increase soil fertility and crop yields.
6. Giving addresses at meetings of farmers; including farmers' institutes, grange meetings, community club meetings and picnics.
7. Judging farm products at community and county fairs.
8. Answering agronomy correspondence.
9. Chicago Grain and Hay Show.
10. Report on wheat contest.
11. Cooperating with the boys' club leaders in outlining projects and lessons.

12. Flax.
13. Circulars.

Definite plans were submitted to all agents for demonstrations in the improvement of crop use of fertilizers and lime. The specialist with the county agent visited 102 demonstrations. He has attended many meetings of farmers and made many individual examinations of farms

Lime Campaign.

Dr. A. G. McCall, of the Soil Department of the Experiment Station, in coöperation with the service, made a special effort to show the need of lime on Maryland farms. A lime day was set aside in which farmers were urged to take samples of their soil and send them to the Experiment Station for testing. Up to date about 1500 samples of soil have been received, coming from about 500 different farms. The great majority of the samples indicated that the soil needed lime. This work will be continued.

High Yielding Wheats.

To aid in improving the yields of wheat in the State, the Experiment Station for a number of years has supplied enough wheat for an acre to five or six farms in each county. It was necessary to discontinue supplying the seed free for these demonstrations, but the work has been continued by supplying growers with a list of names from whom good seed can be secured. Under the Crop Improvement Association, with the assistance of the Agronomists, a list of farmers is being developed who are having their wheat certified. There is room for great improvement in the yields of wheat in many sections of the State.

Developing Soy Bean Industry.

A similar practice has been followed by the Experiment Station in distributing good varieties of soy beans. The Agronomist and county agents have made splendid progress in encouraging the growing of this crop. In soy bean acreage in Cecil county reports show more than 1000 acres, and this acreage has been doubled this year. More than 900 acres in this county are devoted to raising soy bean seed and an organization has been formed to market the crop. Montgomery county also reports a decided gain in acreage this year, claiming not less than 900 acres.

International Hay and Grain Show.

Through the efforts of the Extension Agronomist and the county

agents, especially those in Harford and Cecil counties, a very creditable display of corn, wheat and hay was sent to this national show in the fall of 1919. Maryland was placed in Group No. 4 which consists of the territory to the west of Maryland and Virginia as far as Utah. Maryland's exhibit was excelled by only three States in this great region, including the heart of the corn belt. Of the sixteen prizes awarded for white corn, Maryland won two; and one on wheat. Seven other samples of white corn were considered, and had there been more prizes they probably would have taken them. The winning white corn was all Johnson County White. There are a number of seed corn growers in Maryland who are growing this variety, and consequently it is being distributed over the State.

Report on Wheat Contest.

The special wheat contest, inaugurated by Mr. Edwin Baetjer when Food Administrator, was concluded during the year. The Extension Agronomist managed the contest and measured the yields. The greatest yield per acre from 25 acres or more, was 35.95 bushels, and the first prize was awarded to W. H. Weber & Sons, of Garrett county. The second greatest yield was 35.28 bushels per acre, and was won by J. R. Selby, of Howard county. The third greatest yield was 34.5 bushels per acre, and was won by E. W. Jackson, of Cecil county.

Much time was spent in examining and estimating the yields in the contest. Mr. Oldenburg submits the following summary of his work during the year:

Addresses at Farmers' Institutes	47
Number present at the Institutes	1,831
Addresses at Farmers' Clubs, Grange Meetings, etc	54
Number present at these meetings	3,702
Total number of addresses	101
Total number of persons present at addresses	5,533
Farms visited, demonstrators and prospective demonstrators	101
Other farms visited to plan crop rotations or give advice as to methods of promoting soil fertility	8
Miles traveled by railroad	9,192
Miles traveled by auto	3,243
Total miles traveled	12,435
County and Community Fairs judged	20
Other meetings attended	19
Letters written, approximately	500

ANIMAL HUSBANDRY.

This project was conducted in coöperation with the Bureau of Animal Industry, U. S. Department of Agriculture. On account of reduced finances the Bureau was compelled to call Dr. S. S. Buckley, who was in charge of the project, from the State on April 15th and place him in charge of some important work in the Bureau. This was a great loss to the service and State, as Dr. Buckley was con-

ducting an important piece of work in the State. He was responsible for the splendid growth of the pure bred pig club work and the breeding of hogs generally, as well as the improvement of other live stock.

From the time of submitting the last annual report to the time of leaving, Dr. Buckley devoted his time to addressing 29 farmers' institutes and short courses at various points in the State. He inaugurated a campaign for meat cutting, meat curing and meat canning, and held many demonstrations in coöperation with the Home Economics Specialists. These demonstrations were well received and it is believed to be a fertile field for future work between the Animal Husbandry and the Home Demonstration Departments of the Extension Service. A successful Pure Bred Poland China Bred Sow and Gilt Sale was arranged for and held at Denton on March 20th, 1920. Organization work was begun with the object in view of amalgamating all locally organized swine growers' and breeders' associations with the National Swine Growers' Association. The Hampshire Breeders' Association was organized at Salisbury on this basis and it is recommended that subsequent organizations be formed with similar affiliations.

It was not possible for the service to secure a specialist to carry on this project until October 1st, when Mr. G. H. Bedell was employed to continue the work in special phases of live stock. The service was fortunate in securing Mr. Bedell, who has had County Agent experience and served as Specialist in Live Stock, U. S. Department of Agriculture, Bureau of Animal Industry. Mr. Bedell submits the following results of two months' work. His field work consisted of judging at various community shows, giving judging demonstrations of live stock, principally sheep and hogs:

Number of miles traveled by rail	4,802
Number of miles traveled by auto	356
Number of people visited	15
Number of meetings attended	26
Attendance at meetings	696
Number of letters sent out	246

Mr. Bedell reports having made arrangements with the National Swine Growers' Association where local swine breeders' associations can be affiliated under reasonable fees. Arrangements are now being made for the formation of a strong State swine growers' association, which will affiliate with the State Agricultural Society and the National body.

Wool Work.

The lack of a market for wools in Maryland raised the question of some relief measures to be taken in assisting the sheep men to dispose

of their wool. A plan was worked out by the specialist whereby the wools of Maryland could be manufactured into woolen blankets. By agreement with a mill, a pair of blankets was made upon the receipt of ten pounds of wool and a cash payment of $5.00. With a valuation of 55 cents per pound for the wool, the total cost of blankets with transportation amounted to $11.25 per pair, 72X84 inches in various colorings. In addition, a motor robe in various colorings, weighing about four pounds, was made upon receipt of eight pounds of wool and a cash payment of $4.00.

The program for putting the proposition over in the State was by holding group conferences of County Agents and Home Demonstration Agents for their consideration.

The plan presented to the agents was that the Extension Service was not in the business of selling blankets, but in assisting farmers to market their wool. The farmers' organizations, and the sheep men particularly, are the responsible parties and must arrange to dispose of the blankets in order to have their wool handled under this plan. While this plan has only been proposed during December, farmers are responding enthusiastically and a large amount of wool will be disposed of under this arrangement.

Mr. T. E. McLaughlin, who served as District Agent and Specialist in Animal Industry, resigned July 1st, as previously noted. While most of Mr. McLaughlin's time was devoted to supervisory work, he also did considerable work in general animal husbandry. He made a survey of the horse industry, which showed the need of a registration law for stallions. He assisted in the judging of horses at farmers' picnics and community shows. Mr. McLaughlin assisted in the organization of the dairymen of Maryland shipping milk into Washington, which has developed into a first-class marketing organization.

Hog Cholera Control.

The control of hog cholera has proceeded along similar lines, as heretofore reported. The County Agents and Specialists have cooperated with Dr. I. K. Atherton and his associates, Dr. Cass, Dr. Cole and Dr. McLaughlin, in aiding as far as possible in reducing losses to a minimum.

A summary of the hog cholera work, conducted in coöperation with our agents, is submitted by Dr. Atherton, Inspector in Charge:

Number of meetings held	14
Number in attendance	827
Number of vaccination demonstrations held	38
Number attending demonstrations	841
Number of bulletins distributed	15,000
Number of farms visited by specialists	2,913
Number of persons given special instructions	5,441
Number of outbreaks of hog cholera reported for year 1920	614
Number of miles traveled by members of force	38,855

Miscellaneous Dairy Extension.

In addition to Mr. Wolcott's work, Prof. J. A. Gamble, head of the Dairy Department at the Institution, has been able to supplement dairy extension work in the care, feeding and management of dairy cattle, and especially the manufacturing and marketing of dairy products. The handling of surplus milk at different periods of the year presents a difficult problem. With the coöperation of all forces, plans are under way looking toward increased consumption and for the conversion of surpluses into dairy products.

A Central Testing Laboratory.

Through Prof. J. A. Gamble's efforts, a central laboratory for the collection and analyzing of milk from all sources coming into Baltimore has been established. Thus milk is now sold upon a butter-fat basis. The Laboratory Board consists of one member which is appointed by the distributors of Baltimore, a second by the producers shipping to that market, the third being chosen by these representatives. Professor Gamble has served as the third member and chairman of the board. During the year over 48,000 samples of milk have been taken. Plans are now under way with the hope of establishing a similar laboratory on the Eastern Shore.

Licensing of Babcock Operators.

Within the State are many receiving stations, creameries, etc., where milk and cream is bought on a butter-fat basis. It was found that many Babcock operators know little concerning the proper method of making the test. By a requirement of the State Board of Agriculture, all operators were required to pass an examination. Professor Gamble supervised this work. Over ninety operators have taken the examination, and about fifty per cent. (50%) of these have been granted State licenses. As a result of this work, more than $100,000 have been saved to the dairymen of the State.

Advanced Registry Work.

Professor Gamble reports that during the year, ending December 1, 1920, four hundred and eighty-one cows have been tested monthly for register of merit work on fifty- two different farms. This number includes one hundred and forty-four Jerseys, one hundred and fifty-two Guernseys, one hundred and thirty-nine Holsteins and eleven Ayrshires. In addition to this twenty- three cows were supplied with from seven-day to thirty-day supervisors in the making of Holstein-Friesian records. These figures speak well for the interest of the dairymen in advanced registry work and Professor Gamble and his assistants in accomplishing this result.

Dairy Husbandry.

Mr. G. E. Wolcott, in charge of this extension project, which is supported by Smith-Lever funds, reports the following problems attacked during the current year in coöperation with the County Agents. First, to eliminate low producing and unprofitable cows from dairy herds; second, to lower the cost of milk production; third, to introduce pure bred sires into grade and "scrub" herds; fourth, to stimulate the consumption of milk and its products.

Cow Testing Associations

The first problem was attacked by organizing cow testing associations and by assisting farmers in the keeping of private herd records. The following cow testing associations were organized or reorganized:

The Washington County Cow Testing Association; the Frederick County Cow Testing Association; the Talbot County Cow Testing Association; the First Harford County Cow Testing Association; the Second Harford County Cow Testing Association.

By means of the cow testing associations, dairymen are shown the profit yielding herds. In the Frederick Association, for instance, the highest producing herd average 290 pounds of butter fat; the lowest producing herd averaged 174 pounds of butter fat for the year. Similar illustrations could be cited in the other associations. The specialist addressed several meetings of the associations. The second problem was attacked by instructing dairymen in the use of more economical feeds and in the individual feeding of the herd. Feeding schedules were outlined for many dairymen in the associations.

Considerable progress has been made in the introduction of pure bred sires. Advice has been given in the purchasing of a large number of animals. Several breeders' organizations have been formed in different parts of the State with a view of increasing interest in the respective breeds of cattle.

The specialist has assisted the Home Economics specialists in cooperation with the Dairymen's Association and other agencies in the various milk campaigns for increasing the consumption of this product. He has assisted in dairy exhibits at fairs and in cattle judging demonstrations.

Mr. Wolcott submits the following summary:

Meetings addressed	52
Number present	2,129
Attendance at cow judging demonstrations at farmers' meeting	920— 7 meetings
Farm visits with agents	127
Attendance at cow judging demonstrations at club boys' meetings	368—13 meetings

Ice Cream Law.

After many meetings with the authorities having to do with the enforcement of pure food laws within the State and the manufacturers of ice-cream, a satisfactory bill was written by the Assistant Attorney-General and Professor Gamble and afterwards passed by the State Legislature. The law provides that the fat contents of plain ice-cream be increased from four to eight per cent., or an increase of one hundred per cent., and in the case of other ice-creams from four to six per cent., or an increase of fifty per cent. This increase in the fat content of ice-cream has not only had a tendency to absorb increased amounts of dairy products usually during surplus periods, but also has prevented the foisting upon the consuming public of ice-creams low in fat and in food value. Poor ice-cream has a tendency to curtail the consumption of this highly nutritious and valuable food for all classes and ages of people.

Professor Gamble has addressed many meetings of dairymen and otherwise assisted in general dairy extension work. He rendered valuable assistance in the organization of the Maryland and Virginia Milk Producers' Association and in the establishment of the coöperative milk plant at Cumberland.

Horticulture.

Mr. S. B. Shaw, in charge of this project, reports the following lines of work undertaken during the past year in coöperation with the County Agents: 1, commercial orchards; 2, home orchards; 3, home gardens; 4, handling of small fruits; 5, distribution of truck crops; 6, public demonstrations and field meetings; 7, community short courses.

An effort has been made by the specialist to devote more time to the marketing of fruits than heretofore. Several commercial orchard demonstrations have been conducted by the specialist giving instruction in pruning, general culture, use of fertilizers and in erecting home storage plants. The home storage and community storage project has been emphasized, as the growers have realized its importance during the past year with a good crop of apples and poor fall market.

The usual attention has been given to home orchards of various sizes. In all cases efforts have been made to induce small growers to give their home orchards attention so as to give a profitable return. In home garden work assistance has been given to Girls' Club work.

Handling of Small Fruit.

An effort was made by the specialist to study the shipment and distribution of small fruits from the Eastern Shore territory. The work was planned in coöperation with the U. S. Bureau of Markets. Arrangements were made for the specialists to visit Northern markets and observe the condition of the fruit, especially strawberries, from that region. With the approach of the season it developed that the local juice factories took so much of the fruit that there was no problem in the distribution of the crop. The local demand was hardly supplied, and the Bureau of Markets reported only one car of strawberries reaching New York in bad condition. This project will be continued another season with the hope of assisting in the marketing of the crop.

Valuable assistance was rendered the growers in securing a supply of apple barrels at reasonable cost.

The specialist has assisted in the experiment of bringing the producer and consumer closer together through a system of direct marketing inaugurated by Vernon Bradley, of Cambridge, known as the Maryland Market. A study has been made of the distribution and sale of perishable products on the Baltimore market.

Crop Estimate Reports.

As secretary of the State Horticultural Society and in coöperation with the service and Bureau of Crop Estimates of the Department of Agriculture, monthly crop reports on the estimated production of apples and peaches have been distributed to the growers. This service has been greatly appreciated by the growers in the State.

Mr. Shaw is also continuing the project of securing a survey of all fruit trees in the State, with their respective ages. In one section the survey indicates that in ten years the production of apples will increase 200 per cent.

Field Meetings and Short Courses.

The specialist devoted much time to conducting public demonstrations, field meetings and Community Short Courses. These furnished excellent opportunities for presenting modern methods in the care and management of orchards.

The specialist submits the following summary of activities:

Meetings addressed 22; total attendance 1852
Farmers' Institute Meetings addressed 19; total attendance 484
Meetings addressed at which film entitled "Apples and the County Agent" was shown 13; total attendance 2326
Community Short Courses 10; total attendance 477
Pruning Demonstration Field Meetings other than Community Short

Courses 19; total attendance 255
Spraying Demonstration Field Meetings 2; total attendance 32
Visits to Orchards other than at Demonstrations 115
Conferences Attended 32
Interviews on Horticultural Work 162
Community Shows Judged 12
Gardens Inspected 14
Truckers Visited 7
Miles Traveled by Rail 13 720
Miles Traveled by Automobile, Boat and Electric Line 4,779
Letters Dictated 1935
Circular Letters Sent Out 4,500

Miscellaneous Horticultural Work.

Prof. E. C. Auchter, head of the Department of Horticulture at the Institution, has supplemented the extension work of the specialists. He, with Dr. Jones of the Vegetable Department, has given much time to the tomato problem. A general survey on the cost of growing tomatoes carried on as an Experiment Station project in coöperation with the County Agents has been made. He also aided in addressing mass-meetings of tomato growers held in the State last spring.

A special demonstration was conducted with County Agent Jones in Queen Anne's county to show the value of planting cold-frame plants as compared to the common stick plants. It was shown that it paid to have larger plants and to plant earlier. Fewer of these plants died and the yield was much larger per acre.

A general survey of the sweet potato industry in Wicomico county was made this fall.

Professor Auchter has visited several commercial orchards for the purpose of giving advice and addressed a number of farmers' meetings.

As secretary of the Maryland State Vegetable Growers' Association, the specialist has spent much time in strengthening the organization. A large amount of general extension correspondence was answered and several articles have been written for the press on horticultural subjects.

Vegetable and Landscape Gardening.

The principal farm and home problems outlined under this project, which is in charge of Mr. W. R. Ballard, are the development of the home vegetable garden and the improvement of school and home grounds. The demands during the year have related in a large measure to the landscape improvement rather than the development of the home garden. Consequently, most of the specialist's attention

has been devoted to this important line of horticultural work.

Methods used in carrying on demonstrations consisted in visiting school or home grounds with the County Agents for the purpose of studying the characteristic features, taking measurements and making a preliminary sketch. Owners or committees were consulted as to tastes and desires and from such collected data and study a design was worked out to a definte scale, outlining plan for arrangement, location of walks and drives, trees, shrubs and vines and other features. A blue-print plan was furnished the demonstrator and the County Agent. Accompanying this was a planting list and letter of instruction.

Eleven County Agents, representing nine counties, have been aided in landscape gardening demonstrations. The demonstrations include eleven school grounds, ranging from small areas to one college campus, five farm houses and four suburban homes. In addition, several individual owners have been assisted in selecting sites for homes, laying out roads, locating garages, etc., and establishing and maintaining lawns.

Mr. Ballard did not commence work on this project until April 17th.

Other activities of the specialist included judging at twelve community shows and the judging of 346 home gardens. Mr. Ballard assisted Prof. A. S. Thurston in staging a splendid landscape garden exhibit at the Institution on Farmers' Day, May 30th.

There seems an unusual demand for this class of work, and it is felt that the service cannot engage in more important work than to aid the people of the State in the outside decoration of their homes and schools.

The specialist reports addressing eight public meetings and traveled more than five thousand miles.

Rural Organization and Marketing.

Dr. F. B. Bomberger serves as Assistant Director and ably assists in a great amount of administrative detail and supervision of agents. In addition, he is in charge of the project on Rural Organization and Marketing. The administrative work necessarily interferes with the vigorous prosecution of the project work; nevertheless, with the cooperation of all forces, a large amount of organization and marketing work has been accomplished during the past year. Different phases of organization and marketing are carried on by all specialists and agents. In fact, it is believed that all specialists should direct their attention to marketing phases of the industry in which they are particularly interested. In this report several aspects of the marketing problem are discussed under various projects.

In addition, Dr. Bomberger takes care of all correspondence and details in connection with farm opportunities in the State. He reports the following:

"Every day letters come to headquarters from persons from widely separated points asking for information concerning agricultural possibilities of the State of Maryland. Every effort has been made to assist persons seeking to purchase farm land or homes in Maryland. Lists of farms offered for sale will be compiled. Special literature has been prepared to supply general information concerning the agricultural and other resources of the State. Correspondence and personal interviews with prospective settlers are solicited. The agents and specialists are requested to coöperate in assisting in locating desirable home seekers.

"*Locating Farm Managers, Tenants and Laborers*—A roster of applications for farm managers, farm tenants and farm laborers will be maintained, and applicants for such positions will be put in touch with persons offering such opportunities.

Farm Accounting.

"In coöperation with Mr. R. A. Billings, of the Division of Farm Economy and Farm Management, U. S. Department of Agriculture, a simple farm account book has been prepared for distribution through the County Agents to farmers desiring to keep records of the cost of farm operations. Such records will show at the end of the year the profit or loss involved in operating the farm. They will also materially assist in making out the income tax returns. Special Crop Cost Records for wheat and tobacco and milk are also available for distribution through the County Agents."

Rural Organization

Rural organization work under direction of this specialist is outlined as follows:—

1. Organization of rural communities into granges, community clubs, farmers' clubs, school associations, etc., as conditions may require. Constitutions, by-laws, etc., will be supplied on request.
2. Federation of existing organizations in any community into a community council where conditions may justify such a plan. Constitutions, by-laws, etc., will be supplied.
3. Federation of all community organizations of a county, together with county organizations, such as horticultural associations, breeders' associations, etc., into a county-wide federation, board or council, to be affiliated with the Maryland Agricultural Society, with representation on the Council of the Agricultural Society. Plan of organization will be supplied.
4. Preparation, in coöperation with agents and the respective organizations, of programs of work for community organizations and for county federations.

Play at Junior Short Course at the University of Maryland.
—Photographed in Cooperation with States Relation Service.

5. Coöperation in community celebrations, community short courses, community shows, etc.

The outstanding feature of the results accomplished under this project during 1920 has been successful federation of local and community organizations into county-wide federations, councils, etc. At the end of 1919 only four county federations had been formed; at the end of 1920 there were sixteen counties in which county federations have been organized. In four other counties preliminary steps have been taken, so that it will be only a matter of weeks before the federation of local organizations is complete.

The county federations are becoming highly influential factors in the consideration and determination of matters relating to the rural welfare of the several counties and of the State. At the regular meetings matters relating to agriculture, home demonstration work, roads, schools, health, recreation, marketing farm products and purchase of farm supplies, transportation, telephone rates, legislation relating to agriculture and the general welfare, etc., are discussed and acted upon.

In particular, the County Federations are active and influential in supporting extension work in the several counties. The influence of these organizations in securing public financial support for this work is reflected in the figures quoted previously, of nearly $30,000 appropriated by the several counties as against about $15,000 for last year.

The County Agents and Home Demonstration Agents work in cooperation with these federations in outlining a program of demonstration work to be carried on in the respective counties. Such cooperation results in a more widespread understanding of the significance of demonstration work and a deeper interest in its successful prosecution.

State and National Organization.

A very great value of these federations is derived from the fact that they are all affiliated with the Maryland Agricultural Society, which is the State Farmers' Federation. At the meeting of the Society, held at Salisbury, November 9th, 10th, 11th, 1920, fifteen of the county federations were represented by delegates who took an active part in the discussion of questions relating to marketing, organization and legislation relating to agriculture, which were the central features of the program.

As the Maryland Agricultural Society is now formally affiliated with the American Farm Bureau Federation, the members of the various local and community organizations forming the County Federations feel a direct and personal interest in the accomplishments of this very influential national organization of farmers.

As the Grange is an influential organization of this State it has been the policy of the Extension Service to coöperate in every way

with the officers of State, county and local granges in the pursuit of their work. County Agents and Home Demonstration Agents in the several counties attend grange meetings, frequently take part in the programs, and coöperate with members of the grange in carrying on demonstration work. Nearly all of the new granges organized in Maryland during the past year were formed with the active coöperation of members of the Extension Service forces. In most of the counties the granges, while maintaining their own county organizations, and also their affiliation with the State Grange, are members of the several county federations and participate in the work of such organizations.

The Agricultural Society continues to coöperate with the National Board of Farm Organizations, and in a number of counties the County Federations have been active in raising contributions to the Temple of Agriculture Fund sponsored by the National Board.

Taking the situation as a whole, the status of rural organizations in Maryland is fairly satisfactory. The plan of federation permits of coöperation among organizations of different type without causing the surrender of the individuality of any unit. Such a plan minimizes friction and fosters team work. Much remains to be done in the way of formation and execution of definite program of work; but the ground-work is laid for a really effective and efficient organization of the rural people of the State.

American Country Life Conference.

Dr. Bomberger served upon the committee on Rural Organization of the American Country Life Association and assisted in the preparation of the report of that committee for the annual meeting at Springfield, Mass., October 17th to 19th, 1920. He attended the conference and participated in the deliberations of the association, which is rapidly assuming an advanced position in the formulation of principles governing all phases of rural life in America.

Sheep Organization.

The depression of the wool industry and the fall in price of mutton and lamb has exerted a powerful influence against the development of the sheep organization work in Maryland. Yet in spite of these conditions the State organization is maintaining the interest of sheep growers and the development in the disposition of wool through the sale of blankets, as previously cited under the discussion of Mr. Bedell's work (see Animal Industry project), serves to arouse greater interest in the industry. The specialist is secretary of the State Sheep Growers' Association.

Marketing Conferences.

In order to keep advised of every movement in coöperative marketing, the specialist has attended all important national conferences on this subject. These included the conference of State Marketing officials in New York City February 5th, 6th and 7th, and a similar meeting at Chicago November 29th and 30th. Both meetings were very profitable and enabled the specialist to learn what was being done in this important project in other States.

Dr. Bomberger also attended the meeting called by the American Farm Bureau Federation for the consideration of plans for coöperative marketing of wheat and live stock at Chicago August 22nd-26th. Practically every type and form of farmers' coöperative marketing agency was represented at this conference. The net result of the conference was the appointment of the "Committee of Seventeen," representing practically every phase of the farmers' coöperative movement in America and also the general public, to consider plans for nation-wide coöperation in the marketing of America's grain crops.

Meeting of Maryland Agricultural Society.

The Salisbury meeting of the Maryland Agricultural Society represented the culmination of the efforts of the Extension Service, under Project No. 11, to promote coöperative marketing of farm products and to facilitate the coöperative purchase of farm supplies. At a meeting of the Council of the Agricultural Society in Baltimore on October 1, it was decided that the second day of the annual meeting of the Society should be devoted to a discussion of various phases of the marketing problem, and a committee consisting of Mr. C. E. Bryan, of Harford county; Mr. Edwin Warfield, Jr., of Howard county, and Dr. Bomberger were instructed to outline a plan of marketing farm products and purchasing farm supplies, the plan to be presented at the meeting of the Agricultural Society.

As chairman of this special committee, Dr. Bomberger made a draft of such a marketing program which, with some minor amendments, was adopted by the committee. Later it was presented to the general meeting of the society and, after extended discussion by representatives from practically all counties, the report was adopted with a few minor changes and a committee of five was authorized to carry the program forward. This program will be printed in the annual report of the Agricultural Society and also in the bulletin on "Marketing," shortly to be published.

The special committee of five has been appointed and Dr. Bomberger has been asked to serve as secretary of the committee. Plans are maturing for carrying forward a conservative but definite program for promoting coöperative marketing of farm products and purchasing of farm supplies in the State. Thus substantial progress has been made during the past year in this important aspect of the

agricultural industry. There is approximately $20,000,000 worth of business now conducted in the State through coöperative selling of farm products.

State Grange Committee.

At the State Grange meeting, held in Frederick December 6th-9th, a special committee was named to consider coöperative marketing and purchasing, and this committee will work with the committee of the Agricultural Society. The specialist was a member of the Grange committee.

Coöperative purchasing of Farm Supplies.

There has been a widespread interest throughout the State in regard to the coöperative purchase of farm supplies. Prior to the Salisbury meeting a considerable amount of coöperative purchasing had been carried on by our farmers' organizations. The volume of this business, as shown by our County Agents' reports for 1920, is $335,420. Most of this business has been done through voluntary agreements without formal organization.

Since the Salisbury meeting the farmers' county federations have taken the matter up and have formed committees to consider formal organization of special purchasing agencies. Six county federations are already at work under plans formulated by the service, while others are preparing for organization. The policy of the service has been to advise against hasty or ill-considered action; to begin in a small way on a safe and sane basis and to develop the organization as rapidly as there is demand for it, and no faster.

Bulletin on Marketing Farm Products.

Notwithstanding the innumerable duties and pressure of work on the specialist, he has been able to prepare in compact form a bulletin showing the present status of the marketing problem in Maryland and the progress already made towards its solution. The bulletin includes a discussion of fundamental conditions and principles involved in marketing farm products and a report on miscellaneous investigations and studies made by Mr. P. F. Brookens in the summer of 1918 and Dr. T. B. Thompson in the summer of 1919 under the guidance of the specialist.

Dr. Bomberger submits the following summary of his work:

Meetings attended	152
Attendance at meetings	13,845

Average attendance		91
Addresses delivered		88
Visits to agents		67
Letters dictated		1,932
Number of miles traveled by auto	3,509	
Number of miles traveled by train and boat	11,545	
Total miles traveled	15,054	

Poultry Extension.

Mr. H. W. Rickey, in charge of this project, reports a growing interest among the people in the development of the poultry industry. His work has been carried on by conducting practical demonstrations on the farms in some important phase of poultry culture, lectures and demonstrations at community clubs, granges and other meetings in the interest of agriculture, the publication and distribution of instructive material and the preparation of lessons for boys' and girls' club work.

During the past year the specialist, in coöperation with the Home Demonstration Department, conducted a large number of field demonstrations in culling the flock, killing, dry picking, the making of post-mortems and in the study of diseases. The Poultry Specialist killed and picked the fowls in view of those present, pointed out the effects of certain more or less common diseases on the internal organs. Fowls from the farm flock were handled and culled. Representatives of the Home Demonstration Deparment cooked and canned the dressed fowls and demonstrated the preservation of eggs in waterglass. These meetings and demonstrations were held between May 4th and July 1st, and several of them were held on the farms of demonstrators in winter egg production. It is planned for the coming year to make a special drive with the culling demonstrations all over the State.

Winter Egg Production.

Thirty-three special demonstrations were conducted last winter in egg production. The demonstration is planned for four months, from December 1st to March 1st. During the coming winter eighty poultry keepers have declared their intention of conducting winter egg demonstrations. Weekly reports from the demonstrators are submitted and the specialist with the County Agents visits the farms from two to four times during the period.

Miscellaneous Work.

The specialist has conducted demonstrations in twenty counties, visiting 231 poultry keepers for definite work. He has judged poultry at three community shows and assisted in the boys' and girls' club work. He has addressed a total of 74 meetings, with an average at-

tendance of about 7,000 people. In coöperation with the supervisor of Vocational Education, arrangements have been made whereby the Poultry Specialist will advise and assist the teachers of agriculture and give practical field demonstrations in various phases of the poultry work.

The specialist submits the following summary of his activities:

Farm demonstrations in winter egg production for 1919-1920	32
Weekly reports of demonstrations examined	400
Demonstrations in winter egg production promised for 1920-1921	80
Farms visited in interest of demonstrations	150
Farms visited for other purposes	81
Total number of farmers' meetings, clubs, granges, etc	21
Total number of farmers' institutes addressed	18
Total number of addresses made	74
Total number of schools visited in interest of boys' and girls' club work	11
Total meetings of all kinds	85
Total attandance at meetings	3,514
Total number of miles traveled by rail, boat or bus	9,565
Total number of miles by agents' automobile	3 495
Total number miles traveled	13,060
Total number of letters written	525
Total number of letters received	410

Entomology.

This project is in charge of Prof. E. N. Cory, State Entomologist, with Mr. W. C. Travers as field assistant. Professor Cory reports that the principal problems attacked were concerned with the control of insects injuring fruits, truck and field crops and the development of the beekeeping industry. The demonstration work included the control of insects affecting apple, peach, pear, cherry, strawberries, potatoes, tomatoes, beans, peas and wheat. In most all demonstrations check plots were kept to be compared with the treated plots. In all cases the demonstration work was conducted in conjunction with the County Agents. Mr. Travers has devoted a large part of his time to field work and splendid results have been secured from the demonstrations. In treating orchards the only practical plan is to so conduct the demonstration as to protect the trees, plant or fruit as far as possible from all injurious pests, including insects and diseases, so that the demonstration work in the control of insects also controls diseases that may affect the tree or plant.

Orchard Demonstrations.

In fifteen commercial and six home orchards, where fruit was expected in reasonable quantities, demonstration sprayings were conducted by Mr. Travers. In addition, six orchards where no crop could be expected, the trees were treated under his direction to bring the

orchard into bearing. In these latter demonstrations, pruning, cultivation, fertilization and spraying advice was given with excellent results. The results in the twenty-one other orchards are given in tabular form by the specialists.

In all a total of fifteen commercial orchards, involving about 46,400 trees, have been employed in the commercial orchard work. In home orchard demonstrations six orchards, involving about 225 trees, were used. Good results were secured. Two dusting demonstrations, using a dust compound of 65 per cent. lime, 20 per cent. ground bordeaux and 15 per cent. arsenate of lead were used with variable results. One demonstration in the spraying of cherries is reported.

Control of Pear Psylla.

In an orchard consisting of 1,000 Kiefer pear trees badly infested with Psylla, work was begun on November 20, 1918. Spraying with scalecide and nicotine sulphate, has been followed with good results.

Control of Strawberry Weevil.

The unusually successful work reported last year in the control of this pest was continued the past season. Thirty-seven demonstrations in the control of this pest have been conducted in Worcester, Somerset, Wicomico, Dorchester and Anne Arundel counties. In all cases the effect of the dusting was excellent, though not so marked as in previous years owing to an infestation that was lighter this year than in the years immediately preceding.

A successful demonstration was conducted in Somerset county for the control of the strawberry leaf beetle.

Truck Crop Demonstrations.

Five demonstrations of methods to control the bean aphis, eight demonstrations to control tomato aphis, two methods of demonstration to control the cabbage aphis, one demonstration in the control of the pea aphis, and one demonstration for the control of insects and diseases of Irish potatoes were conducted in the 1920 season. The most interesting feature of these demonstrations was the use of a contact dust consisting of sulfur impregnated with nicotine sulphate applied with a new dusting machine manufactured in California. The machine was used in demonstration work in all the Eastern Shore and Southern Maryland counties as well as in Montgomery, Frederick and Washington.

Miscellaneous Work.

Professor Cory reports that a survey was made on the Eastern Shore for the presence of the Green Clover Worm. Information was given for the control of an outbreak of the Army Worm and an outbreak of the Fall Army Worm.

A survey in four counties on the Western Shore on Hessian Fly conditions revealed the fact that there was a decided increase in the Hessian Fly infestation.

As secretary of the State Beekeepers' Association, Professor Cory has arranged for the annual meeting and aided in the series of winter meetings held in Baltimore.

Professor Cory urges further assistance in the extension work in Entomology, as the demands cannot now be met with his present facilities.

The following summary of the work conducted by Messrs. Cory and Travers is submitted:

A. (1) The principal problems attacked were concerned with the control of insects injuring fruits, truck and field crops and the development of the beekeeping industry.

(2) The control of insects affecting apple, peach, pear, cherry, strawberries, potatoes, tomatoes, beans, peas and wheat together with work in the promotion of beekeeping.

B. (1) The only organization developed was that included in this Department—in other words the leader and his assistant working in cooperation with the county agents. Cooperative work with the Departments of Pathology and Horticulture was engaged.

(2) The total number of meetings was 32. No record of attendance.

(3) a. The county agents solicited our help.

b. No organization was available except in the case of beekeeping where all the work was done through the Maryland State Beekeepers' Association of which Prof. Cory is Secretary-Treasurer.

c. No relation established.

(4) Agricultural, local papers, extension bulletins and the use of an advertograph at county fairs.

(5) a. In most all demonstrations check plots were kept to be compared with the treated plots. In most orchards only a few trees were left untreated since the value of the crop and the liability to increased infestation and infection preclude the use of many checks.

b. 72 farms affected.

c. Data was gathered by the Extension Assistant in conjunction with the county agents.

(6) 1. a. An attempt was made to train county agents in ten counties but they all continue to look to the Specialists for definite recommendations.

Summary of Work, W. C. Travers

Miles traveled by rail	8,920
Miles traveled by boat	1,580
Miles traveled by hired auto	1,600
Miles traveled by own car	490

Miles traveled by bus	2,200
Miles traveled by car for which no charge was made	9,200
Total	23,990
Orchard and farm visits made	1,440
Apple and Peach demonstrations conducted	32
Strawberry demonstrations weevil control	37
Strawberry demonstrations beetle control	1
Strawberrry weevil control experiments	2
Demonstrations in bean aphis control	5
Demonstrations in tomato aphis control	8
Demonstrations in cabbage plant aphis control	1
Addresses at farmers' meetings and community clubs	27
Demonstrations in pruning of apple, peach and grape	12

Summary of Work, E. N. Cory

Farm visits	152
Lectures	15
Miles traveled by train and trolley	2,317
Miles traveled by auto including hired vehicles and county agents' autos	3,206
Fair exhibits arranged	3
Circular letters	18
Technical correspondence	3,704
Press articles	19

Plant Pathology.

Prof. C. E. Temple, who was in charge of this project, was transferred to college work October 1st, 1920. During the summer and at other times during the year when his teaching work will permit, he will assist in extension activities. Dr. R. A. Jehle has been appointed to take up this work as his main project January 1st, 1921. Dr. Jehle has had a wide experience and should be able to carry forward the Pathological work in the State with satisfaction to all concerned.

During the three-fourths of the year Professor Temple pursued the projects peviously outlined in coöperation with the County Agents, which included demonstrations in spraying and dusting of fruit trees for the control of disease. Five orchard demonstrations, with about 1800 trees, were conducted with definite results. Comparisons were made between the liquid and dust treatments.

The project in spraying tomatoes for control of blight, which has been carried on upon a rather extensive basis for three years, has been continued the past season. Three fields were included in the work this season with good results. The specialist has also aided in the production of wilt resistant seed. Four potato spraying demonstrations have been conducted and inspections for certified seed in Allegany and Garrett counties have been made.

In addition, work has been commenced in the certification of sweet potato seed stock. Sweet potatoes are grown quite extensively in

Maryland and much can be accomplished in the certification of seed to prevent disease.

The specialist made a survey of the number of canning house pea fields for root rot and the purity of stock. The Bureau of Plant Industry, through Dr. Shoemaker, ably assisted in the identification of a large quantity of bad seed that was sold to Maryland growers and caused severe losses.

Professor Temple addressed several institutes and farmers' meetings. He submits the following summary of his activities:

Number of addresses at farmers' institutes, clubs, etc	44
Total number of persons in attendance	2,640
Total number of visits to county agents, demonstrators and demonstrations	246
Special conferences attended	23
Total number of miles traveled	8,350
Letters written, estimates	1,400

Farmers' Institutes and Community Short Courses.

The policy heretofore reported regarding the conducting of farmers' institutes and short courses has been continued. An effort has been made to meet all the demands for such meetings. In some counties as many as fourteen days have been devoted to holding institutes in the different communities; in other counties only one or two meetings have been held; in others the work takes the form of the short course. All lecture and demonstration work has been supplied by specialists of this institution.

The following is a summary of the work:

Total number of institutes	79
Total number of days	81
Total number of sessions	154
Total attendance, approximate	10,370
Total number lecturers	33

Miscellaneous Work.

Under this heading may be cited the miscellaneous extension work that is conducted by various specialists connected with the Institution, who supplement the work of the various specialists on the extension staff. It is gratifying to have the able assistance of the College and Station men who generously respond to demands on their time. Prof. W. T. L. Taliaferro always is in great demand for farm management problems and he continues to render valuable service to the State, aside from teaching, in assisting in State work. Prof. G. J. Schulz has greatly aided in miscellaneous lecture work at picnics and general meetings. Dean P. W. Zimmerman always responded in emergency cases for judging, speaking, etc. Professor Zimmerman rendered val-

uable assistance this year in supervising the University exhibit at the Timonium Fair. This was a large piece of work, but with the coöperation of all forces a comprehensive exhibit with the following features was made under the auspices of the Extension Service:

1. Judging Contest in Dairy Cattle for boys between the ages of twelve and eighteen.
2. Special Dairy Exhibit.
3. Milk Exhibit and Demonstration of Milk Drinks.
4. Boys' Agricultural Club Pure Bred Pig Contest.
5. Educational Exhibit of Tuberculosis Control Work.
6. Hog Cholera Control.
7. Horticultural Exhibits.
8. Exhibit of Girls' Club Work.
9. Exhibit of Childrens' Diets and School Lunches.
10. Exhibit of Clothing.
11. Demonstration of Milk Dishes and the Food Value of the Same.
12. Farm Crops Exhibits.
13. Soil Fertilizing Exhibit.
14. Poultry Exhibit.
15. University of Maryland Information Booth.

Prof. J. E. Metzger, in charge of the Agronomy Department of the Experiment Station, has rendered splendid assistance in pushing the Agronomy work in the State. Dr. A. G. McCall, through the soils work in various counties, has aided the County Agents in their soil problems.

Dr. De Voe Meade and Dr. E. M. Pickens have assisted in Animal Industry problems.

The service is especially indebted to Dr. H. J. Patterson, Director of the Experiment Station, for his cordial assistance and advice in all undertakings of mutual concern.

General Educational Extension.

This phase of extension activity has been in charge of Prof. C. S. Richardson, who reports that the work has been carried on through four general divisions—lectures, correspondence courses, motion pictures and High School Public Discussion League. The policy of the department has been to satisfy all voluntary requests for service, but owing to limited finances no attempt has been made to advertise or extend it beyond the point where our present facilities could not properly care for the work.

A total of sixty lectures have been delivered, principally before the faculty and student bodies of high schools. In addition, Professor Richardson has delivered many addresses at picnics and other farmers' meetings.

Correspondence Courses.

A total of 57 students are enrolled for correspondence courses. There is no limit to developing this phase of education if facilities permitted. Seven courses are offered at present; additional courses should be prepared. It is hoped that in the near future the correspondence study work can be extended to serve the great body of students who cannot attend college.

High School Public Discussion League.

The High School Public Discussion League was formed and the membership shows nineteen high schools of the State. Debates were actually held in fifteen of these schools. Letters from the principals commend the work and it may be said that the League is a decided success. The feature specially attractive to the schools is the "package library" sent from this department. Certificates of "Merit in Debate" were awarded to all winners. For the coming year the League will be made State-wide, and it is expected that practically all the high schools will be members. The aggregate of those present and hearing the debates in the different schools is 3533.

Motion Pictures.

The circulation of motion pictures by this department has materially increased in the last two months. A number of County Agents have procured projectors and are using the pictures constantly. So far we have been using the pictures of the Bureau of Commercial Economics and, thanks to the courtesy of this bureau, we have been able to meet practically all the demand for pictures. We are also indebted to the U. S. Department of Agriculture for the loan of films and slides. It would be advisable to procure a few reels of a purely entertaining character, as those now at our command are principally industrial and educational.

As some of those borrowing films do not send adequate information as to time used and as to number of people seeing the pictures, only an approximate estimate can be made of the number of times pictures have been exhibited and the number of people who have seen them.

Total number times pictures have been exhibited.... 522
Total number of people who have seen pictures..... 18234

The work in educational extension presents a fruitful field for development and the specialist has done good work with present facilities.

FARM MACHINERY.

Mr. F. A. Wirt, who was in charge of this project, resigned Jan-

uary 1st, 1920. A full report of his work was given in the last annual report. On account of limited finances a successor to Mr. Wirt was not secured. The past fall we have been able to secure part time service of Mr. R. W. Carpenter, who was employed primarily to do teaching work in Farm Machinery. Mr. Carpenter has devoted available time to learning conditions in the State and arranging for demonstration work this coming year.

Conclusion.

I have thus outlined the main projects of our extension work and discussed the results secured in our many fields of endeavor. An unbiased survey of the year's work demonstrates the growing popularity and appreciation by the people of the State in the advantages and possibilities of this system of instruction. The County Agents, both men and women, are now considered as necessities in carrying forward a proper program of rural development. In fact, our problem is mainly to supply adequately trained agents to meet the advancing needs of our counties. Many counties are requesting assistants to meet increasing demands. The service is lacking in sufficient assistance by specialists as well as in supervisory force. The policy during the past two years has been to first provide for the County Agents in all counties and to distribute the balance of funds as far as practical for supplementary requirements. It is recognized that for successful county agent and project work an able corps of specialists is a necessity. We hope public funds will be forthcoming to adequately provide for the healthy growth of the extension work in the State.

The general outlook in Maryland is most favorable. All agricultural forces are working harmoniously together for advancing the interests of all the people by a safe and regular development of the agricuultural industry.

There are naturally many unsolved problems before us and there are great possibilities for improvement and accomplishment in all phases of our work. With the continued coöperation of the people and with adequate financial support, there will be no doubt of the substantial progress in the rural development of the State that will be manifest from year to year.

The writer is personally indebted to all members of the extension staff for the warmest coöperation and support in the prosecution of the work of the service.

We are all appreciative of the splendid support given the service by President Woods and the encouragement and assistance rendered by the officials of the States Relations Service, U. S. Department of Agriculture, especially Dr. A. C. True, Mr. J. A. Evans and Mr. E. A. Miller.

IN ACCOUNT WITH THE UNITED STATES AND STATE APPROPRIATIONS UNDER SMITH-LEVER EXTENSION ACT, 1919-1920.

		Smith-Lever Funds.		
		Total.	Federal.	State.
Dr.				
Unexpended balance from 1918-1919		.....	.....	.....
To receipts from the Treasurer of the United States and from State sources, as per appropriations for fiscal year ended June 30, 1920, under act of Congress, approved May 8th, 1914 (Smith-Lever Act)		.....	.....	.....
Cr. Abstract.				
By salaries	1	$89,713.07	$46,240.93	$43,472.14
Labor	2	200.00	.....	200.00
Printing and distribution of publications	3	3,026.58	2,000.00	1,026.58
Stationery and small printing.	4	1,319.00	346.71	972.29
Postage, telegraph, telephone, freight and express	5	795.01	88.60	706.41
Heat, light, water and power	6	.....	.....	.....
Supplies	7	349.07	141.76	207.31
Library	8	102.87	4.20	98.67
Tools, machinery, appliances	9	3.00	.....	3.00
Furniture and fixtures	10	302.97	100.47	202.50
Scientific apparatus and specimens	11	9.95	9.95	.....
Livestock	12	.....	.....	.....
Traveling expenses	13	20,050.48	14,003.38	6,047.10
Contingent expenses	14	.....	.....	.....
Unexpended balance		.....	.....	.....
Total		$115,872.00	$62,936.00	$52,936.00

SUMMARY STATEMENT OF EXPENDITURES, BY PRODUCTS, SHOWING SOURCES OF FUNDS USED FOR EXTENSION WORK.

Projects.	Total.	Smith-Lever.		College.	State.	County.	Other.
		Federal.	State.				
Administration	$22,310.63	$12,553.24	$6,183.68	.....	$3,573.71	.....	.....
Printing and distribution of publications	3,912.63	2,000.00	1,026.58	.....	886.05	.....	.....
County agents	84,867.97	25,184.93	19,002.18	.....	19,698.86	$20,982.00	.....
Home economics specialists	.....	.....	.....	.....	.....	.....	.....
Extension schools and farmers' courses	.....	.....	.....	.....	.....	.....	.....
Boys' club work	5,576.66	3,716.66	1,860.00	.....	.....	.....	.....
Girls' club work	.....	.....	.....	.....	.....	.....	.....
Home demonstration agents	40,641.25	15,591.98	9,650.35	.....	9,713.92	5,685.00	.....
Agronomy	3,615.39	200.00	2,819.68	.....	595.71	.....	.....
Animal industry	4,017.40	.....	4,000.81	.....	16.59	.....	.....
Horticulture	4,024.42	695.82	3,068.60	.....	260.00	.....	.....
Dairying	1,819.73	180.00	1,299.73	.....	340.00	.....	.....
Rural organizations	1,203.41	.....	1,151.69	.....	51.72	.....	.....
Poultry extension	3,172.70	300.00	2,872.70	.....	.....	.....	.....
Farm machinery	1,571.57	1,555.51	.....	.....	16.06	.....	.....
Forestry	.....	.....	.....	.....	.....	.....	.....
Entomology	6,134.95	560.00	.....	.....	5,574.95	.....	.....
Pathology	3,334.00	397.86	.....	.....	2,936.14	.....	.....
	$186,202.71	$62,936.00	$52,936.00	.....	$43,663.71	$26,667.00	.....

SUMMARY STATEMENT, BY PROJECTS, SHOWING CLASSIFICATION OF EXPENDITURES FROM ALL FUNDS USED

SUMMARY STATEMENT, BY PROJECTS, SHOWING CLASSIFICATION OF EXPENDITURES FROM ALL FUNDS USED FOR EXTENSION WORK (EXCEPT THOSE FROM U. S. DEPARTMENT OF AGRICULTURE), FISCAL YEAR ENDING JUNE 30, 1920.

Items of Expense.	Total.	Administration.	Printing and Distribution of Publications.	County Agents.	Home Economics Specialists.	Extension Schools and Farmers' Courses.	Boys' Club Work.	Girls' Club Work.	Agronomy.	Home Demonstration Agents' Work.
Salaries	$116,835.96	$17,627.94	.....	$51,623.67	.....	.....	$3,177.99	.....	$2,200.00	$25,880.16
Labor	316.49	196.50	.....	.....	.....	.....	.....	.....	.....	.....
Printing and distribution of publications	3,912.63	.....	$3,912.63	.....	.....	.....	.....	.....	.....	.....
Stationery and small printing	1,319.00	1,319.00	.....	.....	.....	.....				
Postage, telegraph, telephone, freight and express	1,535.40	1,369.20	.....	.....	.....	.....	.....	.....	.....	20.00
Heat, light, water and power	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Supplies	704.89	501.41	.....	.....	.....	.....	.....	.....	58.71	21.30
Library	200.63	102.87	.....	.....	.....	.....	.....	.....	.....	20.00
Tools, machinery and appliances	37.81	3.00	.....	.....	.....	.....	.....	.....	.....	.....
Furniture and fixtures	335.78	309.97	.....	.....	.....	.....	.....	.....	3.00	12.00
Scientific apparatus and specimens	70.05	9.95	.....	.....	.....	.....	.....	.....	.....	.....
Live stock	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Traveling expenses	60,784.57	721.29	.....	33,244.30	.....	.....	2,398.67	.....	1,353.68	14,687.79
Contingent expenses	149.50	149.50	.....	.....	.....	.....	.....	.....	.....	.....
Total expenditures	$186,202.71	$22,310.63	$3,912.63	$84,867.97	.....	.....	$5,576.66	.....	$3,615.39	$40,641.25

SUMMARY STATEMENT OF EXPENDITURES, BY PROJECTS, SHOWING CLASSIFICATION OF EXPENDITURES FROM ALL FUNDS USED FOR EXTENSION WORK (EXCEPT THOSE FROM U. S. DEPARTMENT OF AGRICULTURE), FISCAL YEAR ENDING JUNE 30, 1920.

Items of Expense.	Animal Industry.	Horticulture.	Dairying.	Rural Organization.	Poultry Extension.	Farm Machinery.	Forestry.	Entomology.	Pathology.
Salaries	$2,200.07	$2,795.82	$600.00	$880.00	$2,200.00	$1,164.99	.....	$4,236.79	$2,248.53
Labor	.....	.....	.....	.....	.....	.....	.....	.....	...116.49
Printing and distribution of publications	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stationery and small printing	.....	.....	.....	.....	.....	.....	.....	.....	.....
Postage, telegraph, telephone, freight and express	16.59	.....	.....	.....	.....	.....	.....	129.61	.....
Heat, light, water and power	.....	.....	.....	.....	.....	.....	.....	.....	.....
Supplies	.....	.....	.....	.....	.....	.....	.....	118.59	4.88
Library	.....	.....	.....	40.91	.....	.....	.....	36.85	.....
Tools, machinery and appliances	.....	.....	.....	.....	.....	16.06	.....	4.75	14.00
Furniture and fixtures	.....	.....	.....	10.81	.....	.....	.....	.....	.....
Scientific apparatus and specimens	.....	.....	.....	.....	.....	.....	.....	.....	60.10
Live stock	.....	.....	.....	.....	.....	.....	.....	.....	.....
Traveling expenses	1,800.74	1,225.10	1,219.73	271.69	972.70	390.52	.....	1,608.36	890.00
Contingent expenses	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total expenditures	$4,017.40	$4,024.42	$1,819.73	$1,203.41	$3,172.70	$1,571.57	.....	$6,134.95	$3,334.00

*S. E. Day	Washington	Hagerstown
*W. C. Snarr (Asst. Co. Agt.)	Harford	Bel Air

*In co-operation with U. S. Department of Agriculture.
†Devoting part time to Extension Work.

COUNTY HOME DEMONSTRATION AGENTS.

County	Name	Headquarters
Allegany	*Morgan, M. Rhea	Cumberland
Anne Arundel	*Linthicum, Mrs. G	Annapolis
Baltimore		
Calvert		
Caroline	*Norman, Edith G	Denton
Carroll	*Everett, Rachel	Westminster
Cecil	*Ross, Dorothy	Elkton
Charles	*Gardiner, Imogene	La Plata
Dorchester	*Crippen, Celeste F	Cambridge
Frederick	*Gerber, Frances	Frederick
Harford	*Gittinger, Blanche	Bel Air
Howard		
Garrett	*Henshaw, Laura I	Oakland
Kent	*Hill, Susan V	Chestertown
Montgomery	*Cowsill, Catherine	Rockville
Prince George's	*Davis, Ellen L	Hyattsville
Queen Anne's	*Byrn, Mary L	Centreville
St. Mary's	*Joy, Ethel	Leonardtown
Somerset	*Mills, Louise M	Princess Anne
Talbot	*Walls, Olive K	Easton
Wicomico	*Mullen, Clara	Salisbury
Worcester	*Walter, Lucy J	Snow Hill
Washington	*Frick, Sue W	Hagerstown

LOCAL AGENTS.

*J. F. Armstrong (col.)	Southern Maryland	Seat Pleasant
*L. H. Martin (col.)	Eastern Shore	Princess Anne
*Leah D. Woodson, (col.)	Charles and St. Mary's	La Plata

GARDEN SPECIALIST.

Baltimore City	Mrs. Adelaide Derringer	Administration Bldg. Madison & Lafayette Aves

*In co-operation with U. S. Department of Agriculture.

ONLY THE BULLETINS NAMED BELOW ARE AVAILABLE FOR DISTRIBUTION.

These will be sent free of charge to any address upon application.

AVAILABLE EXTENSION BULLETINS.

No. 2. Feb., 1920—Relation of Lime to Agriculture (Revised).
No. 6. June, 1917—What Maryland's Farmer Boys and Girls Can Do to Help the Nation This Summer.
No. 9. Dec., 1917—Electricity on the Farm.
No. 10. Mar., 1918—Improving the School Grounds.
No. 12. May, 1918—Rural School Lunch.
No. 13. April, 1918—Why We Can.
No. 14. Nov., 1918—The Seventeen Year Locust.
No. 15. Dec., 1918—Milk Cost Survey Report.
No. 16. Feb., 1919—Home Garden Record Book.
No. 17. Mar., 1919—Boys' Corn Club Lessons.
No. 18. May, 1919—Maryland Invites You.
No. 19. April, 1919—Boys' Potato Club Lessons.
No. 20. Oct., 1919—Educational Extension.
No. 21. April, 1920—Sewing Course for Club Members.
No. 22. Nov., 1920—Marketing Farm Products in Maryland.